

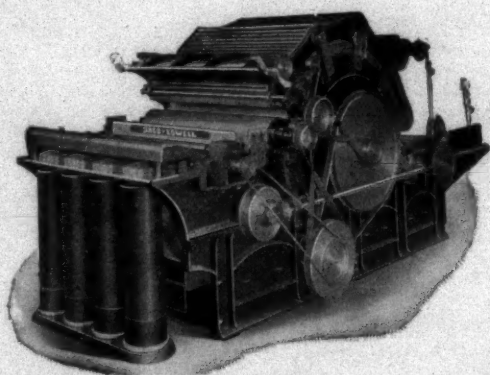
SOUTHERN TEXTILE BULLETIN

VOL. IX

CHARLOTTE, N. C., MAY 6, 1915

NUMBER 10

SACO-LOWELL SHOPS



FOUR COILER WASTE CARD

TEXTILE MACHINERY

Complete Waste
Reworking Plants

ROGERS W. DAVIS, - Southern Agent - CHARLOTTE, N. C.

THE BEST

NORTHROP LOOM

BOBBINS AND SHUTTLES

ARE MADE BY

NORTHROP

LOOM MANUFACTURERS

Look for our name on your Bobbins
and Shuttles

Draper Company
HOPEDALE, MASS.

Southern Agent

J. D. CLOUDMAN, 188 South Forsyth St., Atlanta, Ga.

DRAPER COMPANY

NORTHROP LOOM REPAIRS

FIT

NORTHROP LOOMS

TRADE MARK

MADE BY

DRAPER CO., HOPEDALE, MASS.

Farbwerke-Hoechst Co.

—FORMERLY—

H. A. METZ & CO.

Aniline and Alizarine Colors, Dyestuffs
and Chemicals

Sole Licensees and Importers of the Products of

FARBWERKE, vormals MEISTER LUCIUS & BRUENING
Hoechst - on - Main, Germany

122 Hudson St., New York, N. Y.	210 South Tryon St., Charlotte, N. C.
140 Oliver St., Boston, Mass.	1418 Empire Building, Atlanta, Ga.
104 Chestnut St., Philadelphia, Pa.	20 20 Natoma St., San Francisco, Cal.
23 South Main St., Providence, R. I.	45 Alexander St., Montreal, Can.
317 North Clark St., Chicago, Ill.	28 Wellington, St., Toronto, Can.

A. H. WASHBURN, President F. H. WASHBURN, Treas. & Mgr.

WASHBURN PRESS (RAY PRINTING CO.)

Commercial, Halftone and Color Printing

Engraving, Embossing and Lithographing

BLANK BOOKS AND SPECIAL RULED BLANKS
MADE TO ORDER22 West Trade Street
PHONE 342

Charlotte, N. C.

SOUTHERN AUDIT COMPANY, Inc. PUBLIC ACCOUNTANTS AND AUDITORS

—OFFICES—

901-903 Independence Building, Charlotte, N. C.
811 Chamber of Commerce Bldg., Richmond, Va.

OFFICERS { C. L. SMITH, President and Treasurer
JOHN W. TODD, Vice-President and Assistant Treasurer
WALTER CHARNLEY, Secretary

Manufacturers Should Look Up the Advantages of the

Metallic Drawing Roll

Over the leather system before placing orders for new machinery, or if contemplating an increase in production, have them applied to their old machinery. It is applied successfully to the following carding room machinery:

Railways	Detaching Rolls for Combers
Sliver Lap Machines	Drawing Frames
Ribbon Lap Machines	Slubbers
Comber Draw Boxes	Intermediate Frames

25 TO 33 PER CENT. MORE PRODUCTION
GUARANTEED

For prices and circular write to

The Metallic Drawing Roll Co.
INDIAN ORCHARD, MASS.

John P. Marston

Gum Tragasol

Kerston Sottener

Bleaching Assistant

Bleachers Blue

247 Atlantic Ave.

Boston

SOUTHERN DYESTUFF & CHEMICAL CO.

Charlotte, N. C.

Southern Selling Agents

NATIONAL GUM & MICA COMPANY

Manufacturers and Importers of

WEIGHTING, SOFTENING, FINISHING AND SIZING COMPOUNDS

WEIGHTING SOFTENER
CONCENTRATED SOLUBLE TALLOW
WHITE SOFTENER
SWISS GUM
S. S. SOFTENER
FINISHING PASTES
BLEACHER'S SOAP

MIKAH COTTON SOFTENER
SLASHER OIL
SOLUBLE OIL
DIRECT AND SULPHUR COLORS
BASIC COLORS
POTATO STARCHES
SAGO FLOUR

Perfect materials at low prices. Special information given free by practical men for Sizing, Weighting, Finishing, and Dyeing of all kinds of goods.

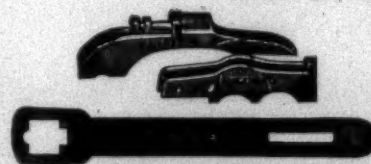
If your Finishing is not satisfactory, call on us. We can help you.

Phone 2972.

Office 1203 and 1204 Commercial Bank Building, Charlotte, N. C.

DIXON LUBRICATING SADDLE CO.

BRISTOL, RHODE ISLAND



Use Dixon Patent Stirrup Adjusting Saddles, the latest invention in Saddles for Top Rolls of Spinning Machines. Manufacturers of all kinds of Saddles, Stirrups and Levers.

WRITE FOR SAMPLE

Trade-Mark

"NIGRUM" Treated Wood SADDLES

Reg. U. S. Pat. Off.

Which Require No Oil or Grease and Save You Money in Many Ways

If not, write to us at once for information



GRAPHITE LUBRICATING COMPANY, - - Bound Brook, N. J.

PURO

Don't Pay Good Money for Impractical, Unmechanical and Often Worthless Fountains.

Here is a practical Fountain, which combines the Faucet and Bubble Features—takes care of the overflow waste, and insures

SAFETY AND SERVICE

This is an age of sanitary plumbing and the Sanitary Drinking Fountain is one of its important subdivisions.

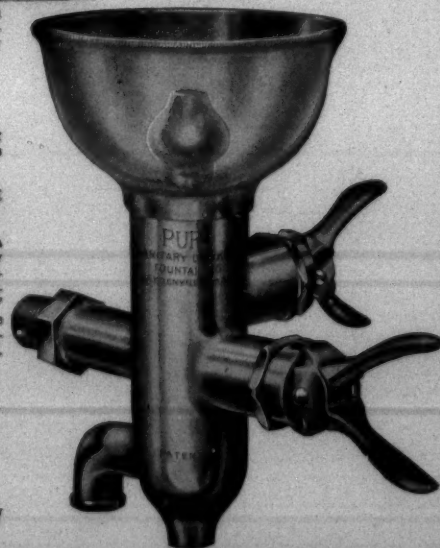
SAFETY PURO SERVICE
FIRST ALWAYS

Is made of heavy brass with extra heavy nickel plate. Bubbler easily controlled by separate "squeeze" handle. No spurts—no choking—inside regulation prevents "shower-bath." Faucet is controlled by another squeeze handle. Faucet gives full water pressure. Has thread for hose if wanted.

Write us the number of your employees and water pressure and we'll present an interesting proposition to you promptly.

Puro Sanitary
Drinking Fountain Company

342 Main Street, Haydenville, Mass.



Actual Size 7" High

SOUTHERN TEXTILE BULLETIN

VOLUME IX

CHARLOTTE, N. C., MAY 6, 1915

NUMBER 10

Our Textile Industry and Europe's Calamity

Arthur H. Gulliver before National Association of Cotton Manufacturers

It is very necessary for us to consider with the utmost care the change in Methods of doing business that have been brought to our attention by the European conflict, particularly as we have never been obliged to even consider it possible that the interdependence between the European nations and ourselves could be broken without warning.

We have a number of industries dependent for raw materials on the continuous running of European manufacturing plants. These raw materials we have found within the last few months were impossible to obtain, and the resulting confusion in operation has shown very serious losses both to the owners and to the customers of industries here that were so allied with plants abroad.

In our particular industry, cotton textiles, we found that the dye-stuff trade, which had depended for a number of years on the expert skill of the Germans, was completely robbed of its supplies by the embargo laid on shipments from said country, and the mills, the bleacheries, and all allied industries that depended on a continuous supply of commercial dyes found that their only dependence was the stock which they themselves might have on hand.

It might be well for us to consider also that England, the largest producer of yarn and cloth from cotton, had been obliged to yield to the supreme excellence and the low price of the German dyes, and, as we read in our textile papers, they have found it necessary to start again in the industry with the assistance of government funds.

It is useless for us to try to compete at short notice with a nation that has made discoveries and experiments, and has spared no expense in producing results from coal tar. It may be possible for us in a number of years,—and I speak advisedly,—to give them some competition, but for us to consider for a moment that we can assume this industry simply because we are short of the product we require for the operation of our plants is not open to argument.

We do not wish to belittle the discovery just reported by Dr. Walter F. Rittman, chemical engineer of the Bureau of Mines, of a process of obtaining from crude petroleum the products known as toluol and benzol, which are the

dyestuffs that are used in silk, cotton and woolen industries. It is Dr. Rittman's expectation that this process may become more economical than the German method of obtaining these products from coal tar, as not only toluol and benzol are obtained, but also gasoline in considerable quantities, which may prove to be an important factor in paying the costs of the process.

Probably in allied industries we shall suffer more from the devastation permitted in Belgium than from the cessation of shipments from Germany, as Belgium has for a number of years followed the practice which we, with our abundant natural resources, have neglected, viz., that success in any industry depends on three conditions: first, absolute uniformity of every yard of product or every pound of material; second, that speed is impossible to obtain perfect results; and, lastly, and perhaps more important, as we have neglected this, to our own serious detriment, that continuity of employment and long experience are prime essentials for continuous, profitable operation.

Taking these three points just stated, it seems best to consider the last one first. What is the reason that, when we wish to obtain the finest steel that is made in the world, we go to Belgium? It certainly can not be the question of price, as those of us who have been buyers know well, but it is the quality, and this quality commands its market. It is not a question of whether it cannot be made in the United States, but that it is not, and the same maintains in the larger end of the steel industry where the output runs into millions of pounds and is laid from one end to the other of the United States, and over which is carried every pound of merchandise and every passenger whose business or pleasure calls him from place to place.

How does this latter product compare with that which is made in Germany? Perhaps it will be best illustrated by noting a fact that was called to our attention a good many years ago, after a number of serious accidents on one of our best managed trunk lines running from the middle states westward. Speaking to one who was well posted in regard to the serious defect that must have been produced in the steel rail in a very short time, as this particular accident occurred on a line of rails which had been replaced by heavier ones within less

than five years, he made the following observation: "Germany does not consider that homogeneity of steel in the rolling process that makes steel rails is necessarily the same. The question of mileage, and mileage alone, determines the life of the rail. They never wait until a structural defect is developed by the pounding of the car wheels."

Does not this teach us a lesson in regard to the question of textiles as well as steel? Is it not wiser to secure the best skill obtainable, made from long experience valuable, rather than to consult only the small figures on the payroll and consider it economy to replace even at a less wage and with younger muscle, the trained and skilled employees who have experience for their value and have long use to add to the worth of their labor?

It seems to anyone observing from the outside, the conduct of various industries that employ cotton as a raw material, either in the bale or in the yarn, that there is a great deal too much expected from want of experience, and after men have been trained for years their services are dispensed with and considered valueless, because the number of years that they have lived exceeds the average of the insurance tables.

We find that our competitors on the other side have not hesitated in the present conflict to use cultivated, experienced brains for the selection of their leaders, even on the battle line, and have not considered the fact of whether they were forty or seventy years of age. It would seem too ridiculous even to emphasize such a point as this, if it had not been called to our attention recently in a plant which had for years been successfully managed by men of long experience, whose training was not obtained by six months or a year in overalls, and the whole personnel of the force in charge was changed on account of the question of age, and age alone.

If we are to compete with the markets of the world with those who now have possession, it cannot be done by any haphazard advertising or by mail order proposition, but by earnest, honest, continuous work, that will take years to put our industries in close alliance with the buyers of even South America, and much more long continued with old nations who have gained their knowledge of the value of furnishing goods produced by firms of long standing so as to keep for themselves

the trade not only of their customers, but to secure a hold with all of those who are attracted by the stability and value of the articles to their establishment.

Is there anything that can be said, gentlemen, to bring this matter more strongly to your attention? It certainly will not require a great deal of consideration when scarcely any of you who are present cannot put your finger on one or more concerns who have exchanged a man of sixty or even over that age for the smart, progressive man of thirty, and although the result may have satisfied the latter, it did not satisfy stockholders. If there is any lesson that we are to learn from the war of slaughter with which the paper are filled, it is the fact that age does not produce stupidity and that ability, backed by experience, is very much more permanent than youth and dash, no matter what the latter may have in its favor.

The brings us back again to the point raised earlier in this article, in regard to the uniformity of product. This must also be emphasized and considered in detail, and the first want or lack that seems to us to meet the manufacturer is this particular is that the weights of our yarn and our cloths are not secured with the proper attention to preventing any possibility of error in the measuring or weighing apparatus used.

We have to consider that the average man, even though he has had quite a good deal of outside experience, is very dull in the use of weights of small caliber that are necessary in handling cotton fibre between the picker room and the spinning. It certainly would be to our benefit as well as that of the plants that we manage that no chance of error that can be prevented by appliances should be allowed.

It is not for us to name any particular device that would prevent the careless man from giving us wrong weighings in process of manufacture nor to advocate any special form of scales, either of pounds or grains, nor any special make of machinery to prevent these errors, but only to call to your attention in the most general way the fact that prevention is much easier than correction.

We perhaps know from our own experience that the average weighing in a mill, even on coarse numbers of the untwisted cotton before it is made into roving, is very careful.
(Continued on Page 8.)

Use for Concrete Construction by Cotton Manufacturers

Leonard C. Watson before National Association of Cotton Manufacturers

It is the desire of the writer to present to you, without tedious detail, the advantages of concrete, plain and reinforced, as applied to the cotton industry. He wishes also to point out some of the safeguards necessary, and to suggest a few uses to which it is not so perfectly adapted as some other material may be. The literature on the subject is very extensive, going into much detail as regards strength of materials, methods of design, etc. Those who wish, can find literature covering almost any special point on which detailed information is desired.

The first use which comes to mind is the larger buildings of a manufacturing plant. One advantage of reinforced concrete in the construction of the principal mills is that small wall columns can be used, permitting very large window areas, so that light is uniformly distributed throughout the length and width of the rooms. The usual design today is the girderless floor, which gives a flat ceiling so that there is no obstruction to light, and the wall beams are above the floor line instead of below. This permits the window frames to reach the ceiling, so that the glass may be within an inch and a half of the ceiling level. The wall beam forms in part the curtain wall between the floor line and the window-sill. As daylight is cheaper than artificial light and as metal framed windows with wire glass are as cheap as masonry curtain walls, there is a saving in first cost of construction, and a saving in operation, due to the illumination. While there is more radiation of heat from the glass area, there is less leakage, due to the tightness of the metal sash, and probably not much difference in cost of heating the building.

Freedom From Vibration.

In buildings where there is reciprocating machinery, like looms, all working together, and whose moving parts have a uniform speed, there is a large advantage in concrete, because the greater solidity and rigidity of this floor over that of any other type absorbs this vibration in the same way that a heavy foundation absorbs that of a horizontal reciprocating engine. Aside from freedom from damage to the building by this vibration, are the stability and free running qualities of the machines themselves. This adds to their life and reduces the possibility of breaking the threads, which affects the cost of operating and the quality of the product. It has been found by some manufacturers that looms can be run 15 per cent faster on a solid concrete floor than on a wooden floor subject to vibration. It has also been found, that, due to the rigidity of the floor, there is a distinct saving in power.

This makes concrete very advantageous for the weave sheds, and the construction of a concrete saw-tooth roof, when properly studied out, is not much more expensive than one of wood, while it has advantages over wood besides that of

fireproofness. The additional material necessary in building a floor for a heavy load, over the minimum which must be used in even a light floor, is relatively small; so that floors carrying heavy loads, as in a storehouse, are cheaply obtained. It is also an easy matter to render the floors and walls so dense, by the proper proportioning and placing of the concrete, as to be waterproof. This makes the material admirably adapted for use in such wet places as dye-houses, where water and steam are freely used. It is an easy matter and relatively inexpensive to make the floors water-tight and to pitch them to drains, so that water can quickly be removed from their surface and the floor below guaranteed against damage from leakage.

Concrete is, however, a better conductor of heat than wood, so that for external walls or roof of a dye-house it is desirable to have a dead air space or some other form of non-conductor to prevent condensation. To prevent condensation on windows, it is desirable to have a double-glazed sash and sometimes a triple thickness. But the design of the sash or frames should permit the separation of the sash for cleaning the glass, as it has been found impossible to fit these so tightly together as to prevent ultimate clouding of the glass in the space.

Concrete For Boiler Foundations.

In the steam power plant, concrete can also be used to very good advantage, not only in the building itself, but for boiler foundations. Especially where the ground is soft and of uneven bearing capacity, concrete is unexcelled, because a reinforced mat can be put over the whole area, so that the boilers are practically floated on their foundations. It is not advisable, however, to use concrete higher up for a boiler setting, although in isolated cases this has been done. Brick is better adapted to this purpose. Concrete is liable to shrink and open large cracks through the setting, which would permit the escape of gases. These cracks, being difficult to fill thoroughly and permanently, are objectionable.

Although concrete will withstand for an indefinite period a temperature of 500 degrees Fahrenheit, a temperature of 800 degrees or more will ultimately disintegrate it. It is thus not a proper material to be used in the fire box, or where temperatures are high. The writer knows of special cases where concrete, using crushed fire brick, has been in use in furnace construction for several years with deterioration. He does not consider, however, that a few isolated examples of this are sufficient to prove its general adaptability for such purposes.

Concrete Chimneys

By the time the burning gases from a boiler reach the chimney, however, the temperature is such that no damage is likely to ensue, and chimneys can be easily and cheaply built of reinforced concrete

Instead of heavy gravity construction as is used with brick, the design is that of a broad base and verticle shaft, tied rigidly together so as to be a unit. Thus the chimney might be compared to a candle, which by itself is unstable, but when set in a candle stick the combination cannot be readily tipped over.

Chimneys are built with various details of design, all of which have proved stable and durable. For ease of construction, the shaft is made of uniform diameter from top to bottom, which gives the chimney a somewhat top heavy appearance as compared to the tapering brick chimneys with which we are so familiar, and to which our eye is educated. This type of chimney can be built more quickly than one of brick, and can be put into service as quickly after its completion. The reason so many are built of concrete is their low first cost. Some concrete chimneys have failed, due to the use of dry concrete.

Those made with wet concrete have proved satisfactory.

Coal Pockets of Concrete

Another use in the power plant is for coal pockets. There are a number of elevated pockets holding a dept of 40 feet of coal, a pressure of over a ton to the square foot, and the material can be economically designed to carry these loads. Even should spontaneous combustion occur in a compartment, it need not necessarily destroy the pocket. Though the burning coal creates a considerable heat, it can either be drawn out or flooded with water before injury to the pocket occurs, while a wooden pocket would be wholly destroyed. From past experience, the writer has found the first cost of such a pocket is about ten per cent. more than that of a wooden one. Its life is much longer.

For engine foundations, plain concrete is now almost universally used. It has greater weight per cubic foot than brickwork, it is more quickly and more cheaply placed, and both tests and experience have proved that it is immune from deterioration by the lubricating oil inevitably spilled upon it.

Surface Treatment of Concrete.

Before dropping the subject of buildings, attention should be given to the treatment of exterior surfaces. The simplest and cheapest treatment is to rub the surface, soon after the forms are removed, with a coarse carborundum stone, cement, fine sand and water. This fills up the voids if any, and removes fins, giving a uniform texture but not necessarily a color. On the final cleaning down of the building, rubbing with carborundum and water gives a uniform color, that of the cement, and therefore permanent. This is a clear gray and of itself is not very pleasing.

A tint can be obtained by the addition of coloring matter which has a strong contrast with the cement itself, preferably a lamp black or

deep red in small quantities, and with colored sand. A warm pleasing tint, such as is found in Indiana limestone, can be obtained without very much expense. A color contrast by the use of red brick for curtain walls and for corner piers makes a very attractive building.

Concrete can be tooled in various ways, as is the natural stone, so as to expose the coarser aggregate of which the concrete is made; and some types of mouldings can be made without serious increment of expense. The cost of ornamentation comes chiefly in the form work. Because the material is plastic, it is easy to fill forms, whether they be plain or ornamental. A mill built several years ago in an adjoining city had a very ornamental front, with ornaments cast in individual moulds, and set, as natural stone would be, around the main entrance and in the cornice above. The difference in cost between this design and the conventional mill construction was less than 2 per cent of the total cost of the mill.

Concrete Dams and Reservoirs.

Equally important with the use of concrete in connection with steam power is its use in connection with water power development. In the development of power from the fall of water in a river, the integrity of the investment depends upon the stability of the dam which impounds the water. The head that can be secured and the nature of the foundations are the controlling factors. Different types of dams have been designed, each of which may be most advantageous in a given situation, but none of which is recommended as being adapted for every position.

With an type of dam, the best time to begin construction is usually in the middle of the winter. Transportation is less expensive over the snow; the low condition of the river is usually favorable to the building of the initial cofferdams; the necessary preparation in the assembling of construction tools and machinery, and the bringing together of the construction force, etc., can better be done at this season. It should be noted that in every hydraulic installation there is a great deal of work that is performed outside of the river bed. If all this is done before the spring floods have passed, the remainder of the season is usually sufficient time for the completion of almost any structure, excepting one of uncommon magnitude.

Type of Concrete Dams.

For a solid rock foundation with a 30-foot head or less, the standard Wegman section of solid concrete, in which a large amount of displacement stone may be used, is the prevailing type, and is lowest in construction cost. When the head is as great as 50 or 60 feet, some other type should be considered, in view of economy. At a height of 100 feet, unless there are other predominant factors, the solid section is the most expensive. In the hollow cellular dam of reinforced concrete, the buttresses or piers, spaced from

12 to 20 feet apart, are connected on the upstream face with a flat slab of reinforced concrete, designed to support the necessary load. This type minimizes the amount of material used in construction, an important factor when the transportation of cement, stone and other materials is a serious item of cost.

A third type, another cellular dam, combines the ideas of the two described, namely, the wide spacing of the buttresses and the arching of the upstream face, with the object of diminishing the amount of material used. This is done by the introduction of a moderate amount of reinforcing steel, at the same time diminishing the amount of construction work by the building of fewer piers or buttresses. On a rock foundation, if the dam is less than 30 feet high, the solid section Wegman type with displacement stone usually costs less. At 50 feet a cellular gravity dam will effect a saving of perhaps 10 per cent; at 75 feet it will perhaps cost 20 per cent less, and at 100 feet the cellular dam will probably cost 30 per cent less than a solid section. These figures are very approximate.

It is where the foundation is not on solid rock that the greatest variation in types of dams exists. Dams have been built upon sand or clay, gravel or mud, and have successfully performed their functions. Very seldom is it necessary to abandon a site altogether, through inability to design a dam which will be absolutely stable and sufficiently low in cost to justify the investment.

Electrical engineers have so perfected the transmission line that it is no longer necessary to build a mill by the site of a dam. Neither is it necessary to have long flumes and canals, unless to utilize the fall of the river below the dam and thus obtain additional head, which sometimes cannot be secured except by this method.

Secondary Power of a River.

In the use or the sale of electrical energy, the secondary power of a river is today a great advantage to the investment. For that reason the power house constructed in the dam is today provided with an excess of generating machinery, so that in times of high water more of the power of the river can be utilized. Studies of generating machinery and the economical load factor of production have shown that, in some markets, generating machinery used for only sixty days in the year well repays the cost of the installation. For this reason, careful study of the river flow, the number of floods or partial floods that may be anticipated, the question of the further development of the river, and the conservation of its head waters, all should be carefully considered. Only then should the amount of the generating machinery be determined upon, or all of the space in the power house allotted, with no provision for further enlargement.

If possible, canals, flumes and penstocks should be avoided, as they restrict the amount of water that can be utilized, and usually confine the generation to the primary or minimum flow of the river, whereas the secondary flow is often

today of greater importance. It has been demonstrated that a varied power market combining night and day users of electrical energy will absorb practically all of the secondary generation. Many manufacturing firms that have installed a hydro-electric station merely for their own use, have found that surplus power was not only a source of income, but an added means for the upbuilding of the community.

The power house constructed in the dam can be designed to utilize a large portion of the flow which would otherwise be wasted. The power house at the end of a canal or flume can use only the water which this canal conveys to it. There is a nice balance between the amount of money to be invested in canals and the proper conservation of the entire power of the river; and the possibility of future storage has to be considered. The power house in the dam will usually be the most economical in construction, as it minimizes both the

amount of concrete and the quantity of excavation.

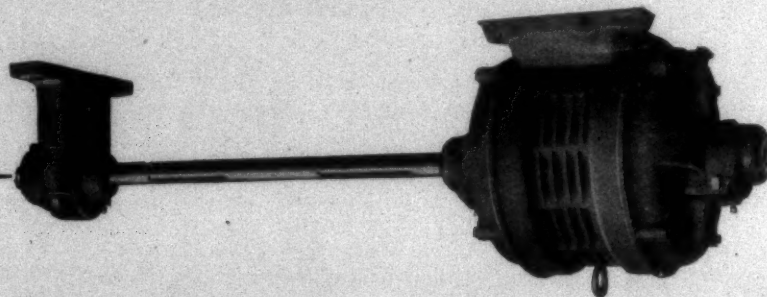
The low head, open flume construction is most expensive, as regards both the building and the generating machinery; and as a rule, the higher the head, the less the cost per kilowatt of complete generating station (considered by itself). A great advance has been made in the adoption of various types of turbines under fluctuating heads and under low or high pressure, and often the type of turbine determines the design of a power house. It is manifestly out of place in a paper as brief as this to discuss the design of various types of dams, power houses, and of the generating machinery installed therein.

Concrete Foundations.

Big block stone is seldom if ever used today for foundations. Concrete, being strong and improving in strength in moist places instead of deteriorating, has become practically universal. Where the ground is firm, the problem is simple.

Where the ground is of moderate bearing capacity, it is very easy, by reinforcing, to spread the load over a wide area, with an increase in depth of not over one-third the spread thus materially saving in excavating. The same is possible with interior piers, by reinforcing the footings in two or more directions. Where the ground is too soft to carry this load, but for a short time will hold its position without slumping, a special form of pier can be used conveniently. A cylinder of thin sheet metal is sunk, the material excavated inside it, and when the solid bearing stratum is reached, the soil is scooped out horizontally so as to increase materially the bearing area. The chamber thus formed is immediately filled with concrete.

In a soil which would not stand more than a half hour by itself, it is possible to increase the bearing area on the ground sufficiently to develop the full strength of the concrete pier. This method may be used for piers 15 inches and up-



Westinghouse Electric CS Motors

Win Again!

The Cone interests controlling large mills in North Carolina recently purchased nearly 2500 horse-power in type CS motors for their new 40,000-spindle addition to the Revolution Cotton Mills.

The superior design and construction of the

Westinghouse Steel-Type Motor

and its adaptability to textile service make it

A Consistent Winner

In a number of the recent large motor installations in the textile industry the type CS motor was selected for its superiority.

Send for full information

Westinghouse Electric & Mfg. Company
EAST PITTSBURGH, PA.

BOSTON
Boston Safe Deposit and Trust Building

NEW YORK
165 Broadway



PHILADELPHIA
North American Building

CHARLOTTE
American Building

ATLANTA: Candler Building

wards in diameter and of lengths up to 20 feet. Concrete piles of various types have been used to good advantage. Some are cast in place, having first driven a shaft to make a hole in the earth, and then used the earth as a form. Again, a steel core is driven with a thin sheet metal covering which is left in place and filled with concrete. Some concrete piles are cast on the surface of the ground, permitted to harden, and then driven like wooden pile.

The carrying capacity of a concrete pile is equal to three wooden piles. Where the ground water level is low, which would require cutting off wooden piles at a considerable depth below the surface of the ground, capping them and building a pier above, concrete piles can be used to good advantage and with economy, because they are brought to the underside of the cellar floor. They thus save in the excavation and masonry necessary to cap the wooden pile.

If it is found desirable to add to the height of a building, and the foundations are inadequate to carry the additional load, they can without much difficulty be underpinned in sections with reinforced concrete. In this way a broad spread can be made as previously described, and with very little excavation. When a short section has sufficiently set, an adjoining section can be opened out and the process repeated, until the whole building is reinforced, when the additional load can be placed upon it.

It is possible also to place concrete safely under water, even at a great depth, if proper precautions are taken and the water is kept still until the cement sets.

Waterproofing Concrete Roofs.

The use of concrete for roofs has simplified the waterproofing problem. Instead of using 5-ply roofing paper, 3-ply will be found ample. The saving from this source often exceeds 2 cents per square foot, or \$600 on a mill 75 by 400 feet. The two extra plies used on a wood roof are needed to make a smooth surface, but the concrete roof is already smooth.

For a picker room, concrete is especially well adapted. It not only makes a room which is fireproof in itself; but it forms a tight surface, through which lint cannot be blown by the pressure of the fans. The contrast in this respect with a wood floor is very marked, as those who have been annoyed by lint hanging down from the ceiling of the room below the picker room can well testify.

Minor Textile Uses of Concrete.

Some of the minor uses for concrete in the cotton industry are for tanks for holding clear water or liquors of various kinds. It is an easy matter to make a tank of the size which is used in wood, and guarantee it water tight in concrete. But it is necessary to use great care in proportioning the sand, stone and cement to get the maximum density, to use the right proportion of water, and carefully to mix and place the materials. Then the concrete is really water tight.

For tanks to hold chemicals or

dye stuffs, the user must consider whether or not these chemicals will attack the tank itself. As the base of Portland cement is lime, acid will attack it. If the concrete is porous, and the tanks are alternately emptied and filled, even alkalis will destroy it due to the crystallization of the alkalis within the pores, which mechanically disintegrates the concrete. Such cases have come within the writer's personal experience. When a tank is new there is a little free lime on the inside surface, which may temporarily affect the solution in the tank, because of the solubility of this lime, but this will disappear after some weeks of service. This must be kept in mind if the nature of the solution is such as to be injured by lime.

Other uses are for filter beds in the filtering of water for manufacturing purposes, and for reservoirs for the storage of water for fire and other uses. Standpipes, due to their size, are very difficult to make absolutely tight in reinforced concrete. To accomplish this result, an impervious lining of some kind must be used.

Another use to which concrete has been put to a limited extent is for cloth pits in bleacheries. Here the result to be obtained is a surface so smooth that no injury will be caused to the most delicate fabrics, and yet so hard that no particle whatsoever will rub off and be mixed with the fabric, which later has to go through other processes, such as dyeing or printing. This type of pit requires special construction to obtain these results. In a recent plant of large size, a number of pits of this type were used, even at considerable increase in cost over wood. Except where heavy acid is used, these pits have proved very satisfactory. Cement walls cannot be satisfactorily acid-proofed.

Design of Concrete Structures.

The subject of design will be briefly covered, and that in a non-technical way. So many tests have been made of beams and girders in laboratory test specimens and in actual work that the theory and practice of design have been thoroughly established and engineers can guarantee results without hesitation. Floors can be built with either beams and girders, beams close together or far apart, as in wood mill design; as well as in the distinctive concrete methods of wide beams with a small panel between, and the straight mushroom or girderless design.

An economical span for ordinary loads as found in the textile industry is from 18 to 22 feet in each direction, making approximately square bays. However, the spacing of columns can be made anything which the conditions demand, from very close together up to very long spans. The longest span ever called to the writer's attention was 106 feet, and this was a roof with 15-foot galleries suspended from it along each side. The longest span built by the writer is 80 feet. From 30 to 50 feet is relatively common, although not as economical as the first named standards.

The loads which can be carried vary from a light load of 25 pounds

Our Spinning Rings SINGLE OR DOUBLE FLANGE

START EASIEST, RUN SMOOTHEST, WEAR LONGEST

Pawtucket Spinning Ring Co.

CENTRAL FALLS, R. I.

THE SEYDEL MFG. COMPANY

JERSEY CITY, N. J.



Sizings and Finishings

Soaps and Softeners

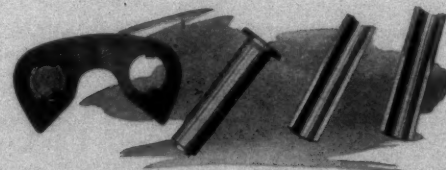
FOR ALL TEXTILES

All Silent Chains Look Alike

Without inspecting the details of construction it is hard to tell the different makes apart.

There is none, however, possessing the Liner Joint of

Link-Belt Silent Chain



THE SUCCESS of the Link-Belt Silent Chain is due almost entirely to the superiority of its joint construction. The segmental liners or bushings, which are removable, extend across the entire width of the chain, thus doubling the bearing surface and halving the bearing pressure on the joint. The bushings (or liners) are case-hardened, and bear upon the case-hardened pin. The latter is free to, and does rotate with reference to the bushings and presents every particle of its surface for wear. As a result it wears uniformly, keeps round, and the chain maintains to the end its high initial efficiency, (98 2 per cent. on actual test).

Write for Link-Belt Silent Chain Data Book No. 125.

LINK-BELT COMPANY

PHILADELPHIA CHICAGO INDIANAPOLIS

New York.....299 Broadway Buffalo.....698 Ellicott Square
Boston.....49 Federal Street Detroit.....911 Dime Bank Bldg.
Pittsburgh.....1501-3 Park Bldg. Cleveland.....Rockefeller Bldg.
St. Louis, Cen. Nat'l Bank Bldg. Birmingham.....General Mach Co.
Montreal, Can.....John Millen & Sons, Ltd.

for a roof, to a ton to the square foot. Columns can be made plain or reinforced. If the building is high and the loads heavy, to save room it is often desirable to carry the load on a structural steel core which is fireproofed with concrete. For buildings up to four stories, reinforced concrete columns will be found the cheapest; and the size is not objectionable in the lower stories unless the loads are exceedingly heavy. For six stories and more, if the lower story columns are too large, structural steel may be substituted. It is not necessary to use

any horizontal structural steel members, as the floors will be supported without difficulty from shelf angles riveted to the steel members. Brackets for crane girders can be easily cast with the concrete columns, where necessary.

Concrete Floor Finish.

An important detail of construction is the floor finish. The cheapest finish is granolithic, a mixture of tough crushed stone and cement, laid either as an integral part of the floor construction or as a second coat following. There are reasons for both types of construction, and

Thursday May 6, 1915.

SOUTHERN TEXTILE BULLETIN.

the argument for and against are too long for the limits of this paper. Another very general type is wood. There are various methods of laying this. The first one is to embed sleepers in the cinder concrete fill, to which a single floor is nailed, and sometimes a double floor. Sometimes a plank underfloor is laid, either loose or mopped down with asphalt, on which a finished floor is laid. Another method is the laying of a porous concrete containing cement, sand and asbestos, to which the floor is nailed direct, the nails holding well in the lower coating. The merits and demerits of the different methods are matters of argument.

On top of a concrete floor, the wood can be laid in whatever direction is desired, whereas on wooden frame floor it can be laid only in one direction, which is determined by the framing. The most serious of the objections which have been found with wooden floors laid solid is that they swell and buckle. Sometimes they have risen 30 inches from place. To overcome this, sometimes bolts are embedded in the concrete construction at sufficient intervals to hold the underfloor rigidly in place, and sometimes slots are left to relieve the swelling. It has been found that underfloors embedded solidly in asphalt rot out in a relatively short time.

The most frequent objection to the granolithic floor comes from the operatives, who claim that the floor is hard on their feet and lames them. An extensive study made by the writer some years ago led to the conclusion that the trouble was solely with the fact that granolithic is a better conductor of heat than wood. Operatives wearing thin shoes complained when their feet became cold, and when standing in one place the circulation was impaired and their legs became tired or lame. By the use of heavy shoes, or by standing on a wooden grating, this difficulty is overcome. Complaints are not received from operatives who move about freely in the performance of their work. The advantages of a clean, smooth floor, low in first cost and cheap in maintenance, can thus be had without any objection from operatives.

Attaching Machinery or Piping to Concrete Floors.

It is an easy matter either to embed inserts in the floor for the attachment of shafting, piping, etc., in a pre-arranged method, or to insert these so that timbers can be bolted to them and allow an elastic method of attachment. Again it is fairly simple to drill holes for the insertion of expansion bolts where no previous provision has been made. The cost of setting these inserts varies with their style, but for material and labor may be said to run between 5 and 10 cents each. They can be attached as readily to corrugated iron, which is today very extensively used for form work, as to the wooden panels which were used most extensively some years back. Corrugated iron is much cheaper to use for form work than wood panels, and the writer thinks it makes a much better looking ceiling.

Details of Concrete Buildings.

Window frames for large areas are made largely of rolled steel sections, sometimes of a single piece and sometimes built up. Both types have their advocates and their individual merits. Actual fire tests have shown that while rolled steel shapes are not as fire resisting as sheet metal formed into a box, yet it is an excellent fire resistant, and unless the fire hazard from an outside exposure is very bad, are good enough. Wire glass is advisable if there is any risk from spreading of fire from story to story, or if there is exposure from without.

Concrete stairs have long since replaced iron, or the combination of iron and stone treads, because they are lower in first cost, non-slipping, and better protection against fire. If desired, safety treads of various types can be permanently attached to the treads, to reduce still further the possibility of slipping.

Durability of Concrete Structures.

A few of the properties of the material may well be kept in mind in connection with the designing. Steel embedded in concrete is prevented from rusting if the cement is in hard contact with the steel, even though the combination be permanently in a wet place. Cement increases in strength with age. Tests have been carried to seventeen years, which show a measurable increment each year. Concrete setting in air shrinks somewhat, and subsequent expansion due to heat never overcomes the original shrinkage due to setting. Therefore cracks open and remain open, and we shall speak of these as contraction, not as expansion cracks.

By reference to the great conflagrations which have taken place, it will be seen that if concrete is properly made it is one of the best fire resistants which we have. As a resistant to heat, the material of the aggregate is important. The stone should be as near fireproof as possible. A trap is very much better than granite. Doubtless you all know how well a concrete mill store-house withstood the great Salem conflagration, and the experiences of the recent great fire in the Edison plant are fresh in your minds. This latter developed, we think, the greatest heat to which concrete buildings have ever been subjected, with the greatest apparent injury to them; but it has been found that they could be restored to their original condition for about 13 per cent of their first cost.

(Continued next week.)

Crystal Springs Bleaching Co. Chicamauga, Ga.

A. E. Yates.....Superintendent
F. E. Blair.....Carder
A. H. Bradley...Spinner and Weaver
Henry Basil.....Master Mechanic

Halifax Mill, South Boston, Va.

D. M. Myers.....Superintendent
M. C. Duncan...Carder and Spinner
J. A. Echols.....Weaver
Bob Sharp.....Night Weaver
F. A. Page.....Master Mechanic

Gibson Manufacturing Company

Concord, N. C.

Dyers of Indanthrene Yarns

ALL COLORS, FAST TO BLEACHING.

Can furnish any numbers from 4's to 36's single or ply on tubes or cones.

Get Free Copy of this Book

"Lubrication of Textile Machinery"

Tells how to put the lubrication of your mill on the most modern basis—Shows a way to extend intervals between oiling three to five times, reducing labor cost as well as oil bills—Explains how you can increase production by abolishing "mill seconds." Every mill owner, superintendent and overseer should have a copy of this valuable book.

It will be sent gratis, if you mention the name of your mill...Ask for it now.

NEW YORK & NEW JERSEY LUBRICANT CO.
Sole Manufacturers of Genuine



165 Broadway, New York

MOORE'S MILL GLOSS WHITE

The whitest interior gloss paint possible to produce—will retain its whiteness satisfactorily for years. It can be re-coated in the years to come without danger of cracking or peeling, and unlike similar paints, will retain its gloss indefinitely. Can be cleansed with soap and water without injurious effects.

MILL FLAT WHITE

Superior in wearing quality to all others for the reason that only prepared and treated oil is used as a binder, and there is absolutely no rosin or gum in its composition. Non-poisonous, as it contains no lead. Will not turn yellow with age.

Mill Water Paints and Mill Colored Paints

Send for Booklet

Moore's products are sold strictly on merit. Will furnish samples free of cost for practical demonstration or test with similar paints. We believe their merits will manifest themselves so that the most skeptical will be convinced.

BENJAMIN MOORE & CO.,

Manufacturers

New York Chicago Cleveland Toronto

Our Textile Industries and Europe's Calamity.

(Continued from Page 3.)

lessly done, and the changes in machinery that have reduced the cost of the carding process have made it still more necessary than it was under the old so-called automatic devices for regulating the amount of stock per yard that went through a machine that these weighings should be as accurate as any device can be made.

Perhaps the use of coiler drawing has shown us that although it is very much better for fineness than the old process of two, three or four strands delivered from separate trumpets, it gives us results in the yarn or cloth that are superior. We have also found that unless the chance of error is removed from the man who does this weighing the average number runs with wider variations and more irregularity than under the slower system of past years.

These variations mean, even in a mill with an average number of 18's, a serious defect in the yarn if sold to the knitter, and a converter or sent to the bleachery. Our competitors, on the other side, have solved this difficulty to such an extent that the English weighted cloth, made by putting foreign preparations in the yarn running through the slashers has secured and kept the trade of the Chinaman, who uses a cheap cloth, properly weighted, for his funeral observances, and the product has had a steady market in China for the very reason that the English manufacturer has secured a regular output on account of the fact that no extra weight of cotton has been used, and the weight of the cloth has been so regular that the finished material, carrying the China clay or whatever preparation is necessary to stiffen it for funeral use, has held the market by the reduction of cost against competition.

This also applies to the German, who uses our waste and makes from it either cloth or yarn and returns to us a uniform product obtained by exceeding care in weighing and preparation from the waste in bags to the sale product.

We will not try to give in detail the value to the stockholder, the manager, the operative, and the customer of regularity, continuous and certain, in weights of yarn or cloth, but it brings one matter to our attention which has for a number of years been in evidence among the

knitting trade of this country, namely, that the most correct weighers and sizers of yarns have been the men that owned or managed a knitting plant. They have found that notwithstanding the reputation of the mill from which they bought, or the fineness of the yarn purchased, even from the best plants in this country, they could not obtain as even a material as they could from across the water.

The results have been so unfortunate in regard to the lengths and sizes of knitted fabrics that they have found that the surest method of producing even a partial remedy was to do their own sizing in whatever material was received, in order that the claims made by them to be settled by the dealer or the mill from whom they obtained the yarn should be guaranteed.

This "absolute uniformity" which has been obtained by the Belgian and the German in the industries that for years they have run so successfully, using metal as the raw material, has been followed as well in the products that use the textile fibre, whether silk or cotton or wool, and the continuous employment of experienced hands has made the output as close to standard as possible, and certainly the lesson brought to our attention by this situation is one that should be learned by everyone who is looking for wider and more extended market. This market, whether it is in this country or in the practically untouched commercial centers of Central and South America, or whether it is across the seas in Japan and China, will have to be sought and held by this uniformity of product, furnished both in sample orders and in continuous commercial transactions, and we must not fail to learn this lesson thoroughly before we undertake to enter the untried field which has taken from us without any effort on our part to secure even our share, without considering have at present any output there, whether we had one-half or one-quarter or even one-tenth of the business in our specialties that was done in these centers.

We understand that the success of our output abroad in products of the ground from crude oil has secured and kept by maintaining, whenever the call for such products arise, an efficient, thoroughly trained force conversant with the needs of the locality in which they are located as well as the way in

which the commodity was put up for sale.

In fact, the lesson learned in Russia from the trade obtained from America on harvesting machinery has taught us in the textile trade that the requirements of a country depend on their own individual preference, and not on conditions of trade in other places.

This cannot be too strongly emphasized in taking this up ourselves with South America. We all know that there is a large future for the textile trade in that section of the world, and of the largest markets where competition properly carried on will secure returns. Very few of American dealers or manufacturers have at present any output there and it behooves us, bearing in mind that success rewards steady, persistent, continuous effort, to seek without fail an output which or a great many years will be permanent.

We shall have to fight diplomatically for location and support of branch banks. We shall have to use a knowledge of Spanish, or whatever tongue is the commercial one used in the country entered, but the rewards will be commensurate with the work.

Again we must take into consideration that it is scarcely five years ago that the first large delegation from the well-to-do and richer classes of Argentine sought their final course of study in the universities and colleges of the United States.

We shall have to remember that for years the ability and brains of these countries have received their education in France, Germany, and England, and the social and business friendships that these educated young men made on the other side have resulted in permanent trade agreements. Only the same kind of acquaintance, unless the war should break them up entirely, can obtain their trade for us.

Of course, we are reckoning on a very large change in relations both in point of transportation by water and by output from concerns in the countries which, when the war is over, will have to mortgage their future to repay the slaughter and destruction which have daily taken place during the last eight months and this debt that these nations will have undergone will be a permanent handicap for probably three generations, and one that may result in throwing largely to England the bal-

ance of trade which Germany has obtained by superior work in countries across the sea.

To return again to the point made about the question of speed in textile operations, it seems as if absolute speed had been our aim in a great many of the plants of this country, particularly those that are on coarse and medium numbers. It seems to be impossible for the average man to conceive that speed is relative both to the operative and to the machine, and we can wisely study the methods that have obtained in the older countries to gain from the average hand the maximum of product and the minimum of poor work. It does not seem as if this point had been taken up exhaustively in the textile business. The experience of older men who have changed their location from plant to plant has taught them that the same amount of product and a better quality can be gained in quite a number of departments of a mill by reducing the actual speed that the machines usually run. The study of the requirements of the room where said machine is located and the thorough understanding of the ability of the hand who operates to take off at a certain speed consistently good work may open our eyes to the fact that some of the problems which the manufacturer on the other side solved years ago have not even been attempted by us.

It would be impossible to go into detail with the various machines, as it seems that each one of us might have a different outlook on what could be done either in the carding or the spinning or the weaving, and perhaps it would be well to add that even after the cloth has left the loom there are several directions in which a larger amount of work at less cost per pound or per yard from the total cost of the plant can be obtained by a careful study of the conditions under which the cloth is inspected or finished.

To sum up in a few words, the problem which meets us from the breach of trade relations on account of the war conditions, we wish to emphasize the fact that even though we succeed in adopting the methods used in Europe and study the conditions of the markets to be obtained outside of this country for goods whose output has been stopped from the older manufacturing, it is a necessity that we add to our

(Continued on Page 15.)

W. H. BIGELOW

AGENTS FOR

ASHWORTH BROTHERS

Tempered and Side Ground Card Clothing

Tops Reclothed. Lickerins Rewound. Cotton Mill Machinery Repaired.

12 to 18 West 4th St., Charlotte, N. C.

240 River Street, Greenville, S. C.

127 Central Avenue, Atlanta, Ga.

DISCUSSIONS BY PRACTICAL MEN

Answer to Old Man.

Editor:

Replying to "Old Man" will say in regard to the size of rings used on No. 8 yarn that a 2-inch ring has all the advantage over a 2 1/4-inch, because of the fact that the traveler does not have to travel such a great distance. I am using practically the mixing represented in his question and have 2-inch rings on a few frames of 8s to care for the waste. To get the greatest efficiency, we run the frames filling wind, and use 3 1/4 times the square root of the number for twist.

The gauge of the frame is 4 1/4 inches and the speed of the front roll 225 revolutions per minute. Of course this cannot be done on warp twist and wind. With 2 1/4-inch rings we could get the speed to 180 only and the work runs as well at 225 as it did at 180 before the change in rings. Of course there is more doffing, but one can well afford it for the extra production.

"Supt."

A Pneumatic Device.

Editor:

I note in your issue of April 15th, a paper by Mr. Frank Nasmith, before the American Cotton Manufacturers' Association relating among other "possible" improvements in the textile industry, suggesting the idea of pneumatic or suction device for spinning frames to take the place of the under clearers.

For the information of the readers of the Bulletin in general I would be glad to state through its columns that this idea has been demonstrated and I have one frame so equipped here at this mill which has been in successful operation over six months. The device is known as the James D. Ezell and John Groom King "Device for Spinning Frames," Patent No. 1104881, issued July 28th, 1914.

By actual test we have found this device decreases the number of ends down by about 50 per cent and it only takes the spinner about half the time to piece the ends up on this frame as there is no cotton to remove from underclearers, and instead of having to depend on the spinner to keep the cotton off the floor it is all delivered at the end of the frame in a bag or other receiver in good condition.

While we are still experimenting more or less with the device in order to overcome such little objections that can only be discovered by actual experience, yet we hope to be able to place it on the market very soon.

J. G. King.

Answer to "Carding."

Editor:

Replying to "Carding's" question in your last issue regarding heavy warps taking his example for, say No. 20's yarn, about 14,000 yards per beam, it would take about 150

pounds of starch to size the set properly, now if we take 70 pounds of starch out, we will make the warps too soft to weave well and it will cost the mill in seconds far more than the 70 pounds sizing or cotton would be worth. In the first place there is no reasonable excuse to make 7 beams 10 pounds to the beam or a total of 70 pounds. It shows gross carelessness on the part of the carder and spinner to allow such a condition to exist in their departments, and if such conditions exist in your mill "Mr. Carding," then you and spinner better get busy and adopt some system of sizing your roving and yarns and bring about a much better condition or there will be something doing in the way of changing overseers. If you will weigh 7 bobbins from your speeder at 8 a. m. and 3 p. m. each day, taking a bobbin from each speeder, if you have 7 fine frames, or more bobbins if you have only 3 frames. Now, don't get them just under the humidifiers, or you will get a bobbin with too much moisture and may lead you astray in the weights. Now take 120 yards from each bobbin, weigh each carefully; (note what frame each bobbin comes from, you will find some times your frames may have different tension, a lay gear that is causing the roving to stretch a little and throw the weight out) add the weight of the 7 bobbins together which equals a full hank of 840 yards. Then take those to the spinner and let him set them in the spinning frame where he gets an average humidity. (Not just under one of the heads). Let him reel off 120 yards from each bobbin, add together he will get the weight of a full hank. If this is done twice each day by carder and spinner there will not be any more talk about warp beams 10 pounds too heavy or light. I ran the carding in a mill of 650 looms and the secretary and treasurer allowed me 4 points either side of the standard on a bale of 4 yards 56x60x36-inch sheeting, and I give you my word it had to come that way or you could look elsewhere for your next payday, I had 16 railway heads in the room. The trouble mostly is in not taking a large enough amount of yards of roving. For instance, you weight 12 yards of roving it is only 2 grains off the standard for the say 48 yards, that is 4 bobbins, now what is off for a hank 840, it is about 37 grains too heavy to the hank, so if you increase the yards of roving you get a better average of your roving and change your draft gears accordingly.

Superintendent.

Link Belt Electric Hoist.

The Link Belt Co., of Philadelphia and Chicago have recently put on the market an electric hoist suitable for dyehouse and slasher tracks.

They claim the following advantages for their hoist:

A minimum number of parts means fewer parts to wear out and less maintenance charges, as each part has been designed with a large factor of safety.

The cut steel gears run lubricated. The cut steel gears run in oil and automatically splash-lubricate all bearings. The oil supply lasts for months, and constant attention, as with oil or grease cups, is not necessary. Oil cannot spread along shafts.

A dynamic braking system is used whereby the descending load drives the hoisting motor as a generator and uses it for a brake.

A powerful solenoid brake automatically holds the load when current is shut off or otherwise interrupted. Adjustable upper and lower limit "stops" automatically shut off the current and apply this brake when the load reaches its pre-determined limits of travel.

Hoisting cable can be replaced in ten minutes. This is made possible by the manner in which the cable is secured to outside of drum.

Safety—The hoist is entirely safe. 1st. Because all parts have been designed with a large factor of safety, and forged steel gears are used.

2nd. No cast iron is used in tension between point of support and the load.

3rd. Even if the powerful solenoid brake became inoperative the load would not fall but descend slowly.

"The Little Boss."

Editor:

Having been a reader of your paper or several years and believing that you believe in fair play to all, I wish to say a few words in favor of the "Little Boss" and those under him. Perhaps we do some times fail to understand the Big Boss as W. O. C. says, but how often is it that he fails to understand us. W. O. C. says that he doesn't desire to see his men quit, because things go a little wrong, but does he ever stop to think that we are also human and have ambitions of our own, that we do not wish to be changing from one place to another, but that he desires to rise with the growth of the mill he is working with. A true second hand or overseer is on that realizes that the success of the mill depends much upon himself and he should and always is trying to improve the quality and quantity of the production from his room. It is nothing but human nature for him to expect to receive remuneration for what he has done, many a man has worked for years at less pay in hope that he might rise in the ranks. He oils for \$1.00 or \$1.10 per day when he might be making \$9.00 or \$10.00 per day on some other work in the mill. He has gone through the mill or some department of the mill learning each process and familiarizing himself with each machine. He takes

the textile papers spends hours of study and thought each day and many a night burns the midnight oil. Perhaps he is given a second hand's or overseer's place in the mill in which he is working when there is an opening, but generally he has to go to some place where he is not known to get a position even as fixer, while some special favorite of the Big Boss gets the position to which he is entitled. His hopes have been shattered, but unwilling to be downed, he determines to rise regardless of the obstacles which he has to overcome.

As fixer in the mill to which he has gone, he begins to see many things that might be done. Perhaps the man that was on the job before him was not competent, but any way the new man finds that he can better conditions over which he has charge, not being one that is always hunting for a new habitation, he bends his back and settles down at this new place. He goes to work with the determination to succeed and has the satisfaction of seeing his work improve. After much hard work and study, he spends his money for textile papers and books, asks questions through the discussion pages of the papers and by hard study and work he soon begins to make things climb up hill. After he once gets things in top-notch shape he tries to keep them there. The production is increased, the help is better satisfied, but as yet he has not received one word of thanks or encouragement from the Big Boss. But thinks the man to himself perhaps he hasn't noticed the results yet. However, month after month goes by and still no recognition comes from his Big Boss. The man knows that he is making more money for the company than was made before and would not be surprised to find more pay in his envelope but as that never happens he concludes that the man higher up has something better in store for him. After staying for several years there is perhaps an opening for a better position. But who gets the place? Why nine times out of ten it is some outsider to whom Big Boss feels he is obligated. What is the result?

Naturally it is to be supposed that the man would quit and who could blame him, but not being of the moving kind he stays on and then the Big Boss will say, "That man is a d— fool for staying after the way I have treated him. I know that he deserves the better job, but I promised Jim that if I ever got a chance that I would repay him for his kindness that he did me about ten years ago. I ought to increase the other man's pay for him, but I guess he is very well satisfied with what he is getting. He has every thing in tip-top shape and don't seem to work so very hard, besides he has a large family of children and I doubt if he could move without transportation."

Joe, we will call him, has by this

(Continued on Page 16.)

SOUTHERN TEXTILE BULLETIN

Offices: Room 912 Realty Building, Charlotte, N. C.

Published Every Thursday By

Clark Publishing Company

DAVID CLARK, Managing Editor

D. H. HILL, Jr., Associate Editor

SUBSCRIPTION.

One year, payable in advance	\$1.00
Other countries in Postal Union.....	2.00
Single copies	.10

Contributions on subjects pertaining to cotton, its manufacture and distribution are requested. Contributed articles do not necessarily reflect the opinion of the publishers. Items pertaining to new mills, extensions, etc., are solicited.

ADVERTISING.

Advertising rates furnished upon application.

Address all communications and make all drafts, checks and money orders payable to the Clark Publishing Company, Charlotte, N. C.

Entered as second class matter March 2nd, 1911, at the post office at Charlotte, N. C., under the Act of March 3d, 1879.

THURSDAY, MAY 6, 1915.

Optimism.

In a personal letter received this week from a cotton goods broker in New York is the following extract:

"I feel that if things keep up the way they have started recently, ere long, we will have a real textile business in this country, the first since the period before the panic of 1907. The Fall may see this situation. I believe that more looms are now running North and South than since 1907."

This extract was not intended for publication and is the opinion of a well-posted cotton goods broker.

The period prior to October, 1907, was one of unusual prosperity in the cotton manufacturing business and we would like to see such times again for they would put most of our mills on a permanently sound basis.

The two years period following October, 1907, were the worst that the cotton manufacturing industry has ever known, but for political reasons we never hear much about that period.

It was infinitely worse than the late depression or that of 1893 and we hope that many years will pass before we see such another

The Suicide's Mistake.

Last week we published notices of suicides of two men of some prominence in the cotton manufacturing industry.

One was book-keeper for a successful mill and his self-destruction seemed almost without a shadow of an excuse. His town was divided by a county line and an election was being held under an act of the Legislature to decide upon a change in the line so as to throw the town entirely into one county or the other.

Such an election was naturally bitter and excitement reached a high pitch. The book-keeper was a strong partisan and when he realized that his side had lost he took his life.

It was a strange act and in charity we must conclude that he lost his mind before the deed was committed.

The other suicide was a sadder case and one that we have felt because we were in close touch with the man and he was our friend.

It was a cotton mill superintendent who had been out of a job for a long time.

He was raised as a carder and fin-

ally secured a position as superintendent of a small mill. He did well and later secured a somewhat larger mill, which he ran for five or six years.

About this time last year he lost his job, for some reason which we do not know, and he took the first train to Charlotte to see us about securing another one for him.

Because he had always shown himself our friend and because his record was good we did all we could to help him and sent him many notices of vacancies, but somehow it seemed that he could never land, and he became very much discouraged. We have taken his letters from our files and feeling almost like they were messages from the dead, have noted the following extracts:

"I appreciate the interest you have taken in my behalf, but it seems hard to secure a place."

Again he said:

"It seems that every time some one else is always ahead of me."

Later he wrote:

"I feel sure that you are doing all you can for me and appreciate it very much."

In spite of our efforts he did not secure a position and we had heard nothing from him until the news came that he had taken his own life.

It is not ordinarily the functions of a journal to aid its subscribers who are out of positions, but because of the peculiar position that we occupy in this field and because we usually know of vacancies before anyone else we are often in position to help men and one of the pleasures of our existence is being able to do so.

It is not a service that brings in financial returns and it requires a considerable portion of our time, but we have a feeling for the "under dog" or the man who is down and the gratification of seeing him start upward again is worth more to us than financial returns.

We come in daily contact with men who are out of positions and we have come to know them even so as to divide them into types. We have seen them discouraged when effort after effort has been met with failure, but we have also learned that the man who has the spark of fight in him will sooner or later get located and "come back" strong.

History shows us that some of the greatest successes in the world have been made by men who failed not once but several times and the man who keeps his spirit can sooner or later "come back."

The superintendent who killed himself last week left a wife and several children and as much as we

dislike to speak ill of a friend who is dead we must brand him as a coward who shirked his responsibilities. We know that he was discouraged at his repeated failure to secure a position and we can realize his feelings of desperation, but he should have been man enough to face whatever came and he should not have left a stigma upon his name and that of his children.

He thought that the quick motion of his finger against a trigger would end it all, but with the flash of the pistol he began a journey through eternity, and who would dare say that he made a good exchange?

Ingersoll delivered his greatest lecture upon the right of man to take his own life and it was followed by a wave of suicides throughout the country but Ingersoll was an infidel, an atheist who professed to believe in no hereafter.

The man who believes there is an eternity should hesitate long before he jumps off into that dark and upknown chasm in order to escape a few worries in this world.

In spite of the seriousness of this subject it appeals to us as ridiculous and almost humorous that because a man is out of a job for a few days or weeks he should send his soul into another world and take chances on eternity—an endless procession of days, and weeks and years and centuries.

It is a gamble such as no one would take in worldly matters. It is like betting a million dollars against one cent that the sun will not rise tomorrow.

Our friend was discouraged and depressed, but he made a mistake which he can not rectify now. His troubles were not as bad as they seemed, for troubles never are, and if he had kept his nerve he would before long have been located and been happy again.

What we say can not hurt or help him but maybe we can cause some one else to stop and think.

The Loan to the Mill Hand.

The thrift and honesty of the North Carolina mill people is proverbial. The New York Journal of Commerce passes around the Durham Hosiery Mills incident in proof of this contention. A little over a year ago this corporation established in connection with its welfare work a loan fund, so that in case of necessity a mill hand could borrow from this fund, which is controlled entirely by the employees, the mill contributing a percentage. The result of the first year shows that loans were made to the extent of \$8,912.19, with a loss of only \$7.80. This is an incident that is typical of welfare work and appreciation in North Carolina cotton mill settlements, where the labor employed is of the best class the world affords. —Charlotte Observer.

PERSONAL NEWS

H. L. Jay of Eatonton, Ga., has accepted the position of overseer of weaving at the Aragon (Ga.) Mills.

G. W. Misenheimer has resigned as master mechanic at the Eureka Mill Chester, S. C.

Fleming Briggs has resigned as overseer of carding at the Ware Shoals (S. C.) Mill.

Clyde Bigham has been promoted from machinist to master mechanic at the Eureka Mill, Chester, S. C.

R. G. Mims has resigned as overseer of weaving at the Aragon (Ga.) Mills.

James Escott has resigned as overseer of weaving at the La-Grange (Ga.) Mills.

I. L. Ray has resigned as overseer of weaving at the Ashcraft Mills, Florence, Ala.

E. R. Caldwell, of Rock Hill, S. C., has become overseer of slashing at the Exposition Mills, Atlanta, Ga.

W. R. Barnes, of Reidsville, N. C. is now roller coverer at the Pickett Cotton Mills High Point, N. C.

W. H. Stradley of Trough, S. C., has accepted a position at Buffalo, S. C.

J. F. Blackwell of Trough, S. C., has accepted a position with the Whitney (S. C.) Cotton Mills.

B. M. Childers has resigned as loom fixer at the Louise Mills, Charlotte, N. C.

T. L. Garris, of Salisbury, N. C., is now fixing looms at the Louise Mill, Charlotte, N. C.

A. C. McSwain has become loom fixer at the Louise Mills, Charlotte, N. C.

Chas. F. Abbott has been elected secretary of the Avondale Mills, Birmingham, Ala.

Donald Comer has been transferred from secretary to vice president of the Avondale Mills, Birmingham, Ala.

R. P. Hamilton has resigned as overseer of carding at the Appalachian Mills, Knoxville, Tenn.

J. T. Russell of Lindale, Ga., is now fixing looms at the LaFayette (Ga.) Mill.

B. F. Spears of Bennettsville S. C., has accepted the position of overseer of carding at mills No. 1 and 2, McColl, S. C.

A. R. Foushee has been elected president to the Roxboro (N. C.) Cotton Mills to succeed the late J. A. Long.

Walter Smith, overseer of carding at the Coosa Mfg. Co., Piedmont, Ala., has purchased a five-passenger Ford touring car.

Z. L. Underwood has been promoted to second hand in spooling and warping at the Edna Mills, Reidsville, N. C.

F. D. Lockman has been promoted from overseer of weaving to superintendent of the Lockhart (S. C.) Mills.

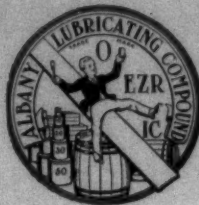
K. S. Tanner, manager of Cleg-horn Mills, Rutherfordton, N. C., has been elected a member of the city council of Rutherfordton, N. C.

T. J. Tice has resigned as master mechanic at the Dunson Mills, La-Grange, Ga., and gone into the automobile business at that place.

John Prince has been promoted from second hand to overseer of spinning at the Dwight Mfg. Co., Alabama City, Ala.

W. E. Williams of Quitman, Ga., has accepted the position of overseer of twisting and winding at the Louisville Cotton Mills, Louisville, Ky.

A. J. Barber has resigned as section hand in spinning room No. 2 of the Fulton Bag and Cotton Mills, Atlanta, Ga., to become second hand in spinning at the Union Cotton Mills, LaFayette, Ga.



ALBANY GREASE

For the lubrication of all kinds of mill machinery. It is easily applied, efficient and economical. Send for samples to try. No charge.

Your dealer sells Albany Grease

ALBANY LUBRICATING COMPANY

708-10 WASHINGTON ST., NEW YORK.

R. J. Smith has been promoted from frame hand to card grinder at the Villa Rica (Ga.) Cotton Mill.

J. F. Turner is now second hand in spinning at the Woodside Mill, Greenville, S. C.

H. C. Cranford has been promoted from second hand to overseer of No. 1 weave room at Lockhart, S. C.

W. R. Hill has been promoted from loom fixer to second hand in weaving in the No. 1 weave room at Lockhart, S. C.

W. L. Meroney of Silver Creek, Ga., has accepted the position of second hand in cloth room at Massachusetts Mills, Lindale, Ga.

Chas. Parnham, of LaGrange, Ga., has accepted the position of overseer of weaving at the LaGrange Mills of that place.

S. H. Brown has resigned his position with the Pacolet Mills, Trough, S. C., to accept one with the Wallace Mills, Jonesville, S. C.

A. E. Yates superintendent of the Crystal Springs Mill, Chicamauga, Ga., has returned from a trip to Canada.

E. Montgomery, superintendent of the Summerville (Ga.) Mills, has returned from a visit to relatives in Oklahoma.

G. M. Vann has resigned as overseer of weaving at the Glenola Mills, Eufaula, Ala., and accepted a similar position at Ashcraft Mills, Florence, Ala.

S. V. Smith has resigned his position at the Jewel Mills, Thomasville, N. C., to take charge of the combers at the Amazon Mills, of the same place.

H. R. Moss of Palmetto, Ga., has accepted the position of overseer of carding at Villa Rica (Ga.) Cotton Mill.

J. M. Cannon, superintendent of the Fountain Inn (S. C.) Mfg. Co., was a visitor at the Woodside Mills, Greenville, S. C., on Monday.

B. F. McClure of Columbia, S. C., has accepted the position of night superintendent of the Bladenboro Cotton Mills, Bladenboro, N. C.

H. T. Godfrey has resigned as second hand in spinning at the Woodside Mills, Greenville, S. C., to become overseer of spinning at Fountain Inn, S. C.

G. W. Chaney has resigned as overseer of spinning at the Hartwell (Ga.) Mills, to accept a similar position at the Dacotah Mills, Lexington, N. C.

J. L. Fonville has resigned as carder at Marlboro Mills No. 1 and 2, McColl, S. C., to become overseer of carding at the Appalachian Mills, Knoxville, Tenn.

J. G. McDonald has resigned as night superintendent of the Bladenboro (N. C.) Mills and accepted a position at the Marlboro Mills, McColl, S. C.

Mrs. B. J. Bobbins Dead.

The many friends of B. J. Bobbins, general superintendent of the Henrietta (N. C.) Mills, will sympathize with him in the loss of his wife, whose death occurred at Charlotte last Friday. Mrs. Bobbins was a Miss Langston of Laurens, S. C., and was very much beloved and respected by the people of Caroleen, N. C., where she has lived for many years. She was buried at Caroleen.



Cramer System of Air Conditioning

WITH OR WITHOUT

Automatic Regulation of Humidity and Temperature

Moderate in Cost

Cheap to Operate

Yields Big Returns

STUART W. CRAMER

CHARLOTTE,

NORTH CAROLINA

MILL NEWS ITEMS OF INTEREST

Forsyth, Ga.—The Ensign Cotton Mills, which now have 6,000 spindles on 7s to 14s yarns will be doubled in size. Contracts for machinery will be placed at an early date.

Rome, Ga.—The Anchor Duck Mills are installing a filtering plant. They get their water from a spring west of the city and all the water both for the mill and the village is to be filtered.

West Point, Ga.—J. E. Sirrine, Greenville, S. C., will prepare plans for \$500,000 cotton mill for West Point Mfg. Co., reported last week. The new mill will have 20,000 spindles; will manufacture cotton duck.

Arkwright, S. C.—Two one-story frame buildings on South Liberty street, owned by Arkwright Mills and occupied by John Massey and Tom Ehook, operatives in the mill, were totally destroyed by fire Sunday afternoon.

Rome, Ga.—The Anchor Duck Mills are pushing construction on their 100x200 foot addition, which will be standard mill construction. They will add 1,200 spindles to make coarse yarns and rope and will install 20 bag looms for high-grade seed bags.

West Point, Ga.—Contracts for the equipment of the new 25,000 spindle mill to be built by the West Point Mfg. Co., have been let. The pickers, cards, drawing and spoolers and slashers will be furnished by the Saco-Lowell Shops, the Woonsocket Machine & Press Co. will furnish the roving machinery, and Howard & Bullough will supply the spinning. Contracts for looms has not yet been placed.

Augusta, Ga.—The annual meeting of the stockholders of the Sibley Manufacturing Company was held Wednesday at the office of the company at the mill. B. P. Rainsford presided.

The regular reports of officers were submitted and all officers and directors were re-elected as follows:

T. S. Raworth, president and treasurer; H. C. Chafée, secretary. H. K. Lowry, T. R. Wright, P. E. May Cecil Cochrane, Wm. Schwelgert and Boykin Wright.

Hendersonville, N. C.—The Skyland Hosiery company states that despite the business depression over the country, March was the biggest month in the way of business this mill has ever experienced. Manager C. P. Rogers announces that 225,000 pairs of men's hose were shipped during the month and that orders are being received continually, making it necessary to run night and day, with an increased number of operatives. While the price of hosiery is not up to the standard, the increased volume of goods justifies extra time and labor.

Durham, N. C.—The sale of the Commonwealth Cotton Mills to Brodie L. Duke was completed last week and the mill will be put in operation at an early date. A previous sale to Mr. Duke was not completed but this transaction is said to be final.

Zebulon, N. C.—The Zebulon Hosiery Mills, manufacturers of seamless half-hose, will shortly increase their capitalization to the extent of \$20,000 by issuing 7 per cent accumulative preferred stock to that amount. No statement has been made as to improvements, but it is understood that the company is planning extensions.

Enoree, S. C.—The entire property of the Enoree Manufacturing Co., which has been in the hands of a receiver for some time, will be sold at auction on June 7. No bid of less than \$50,000 will be considered, and the terms will be cash. The sale will include all assets, both real and personal of the company, including 720 acres of land.

Kings Mountain, N. C.—The Anna Cotton Mill of Kings Mountain filed an amendment to its charter Tuesday, increasing the capital from \$95,000 to \$125,000. The officers are J. S. Mauney, president, and S. A. Mauney, secretary. The Klotho Mill, with the same officers, filed an amendment increasing its capital from \$95,000 to \$125,000 some days ago.

Graniteville, S. C.—The annual meeting of the stockholders of the Graniteville Manufacturing Company was held last week.

This was the first time the stockholders had opportunity to view the improvements on their property. During the last eighteen months on Mill No. 1, there has been put in extensive machinery equipment and there have been installed the 700 new Draper automatic looms. The expenditure has been \$250,000.

At the meeting routine matters only were transacted. Officers re-elected were: President and treasurer, T. L. Hickman; superintendent, W. A. Giles; secretary, A. H. Gilbert; directors: J. C. White, F. J. Pelzer, Jr., S. A. Fortson, E. S. Johnson, C. E. Whitney, W. B. White.

Covington, Ky.—The liquidation committee in charge of the Argonaut Cotton Mill announces that the mechanical equipment, brands and good mill of the plant are for sale. The mills are now in operation, producing cotton twine, carpet warp, wicking, etc. The capacity is 4,864 ring spindles.

Differences among the stockholders have caused the decision to liquidate, although the mill earned 13 per cent net on its capital stock of \$75,000 during the six months ended April 17, 1915. A plentiful supply, cheap coal and low freight rates (rail or river) are assured by the location of the plant. The committee will be glad to furnish further information.

Anderson, S. C.—The first annual meeting of the stockholders and directors of the Equinox Mills were held in the office of the company last Thursday afternoon. The mills have experienced a good year and the reports of the officers were gratifying to the stockholders.

The board of directors was re-elected to serve another year. This board is composed of W. H. Wellington, H. S. Sears, S. G. Wellington, H. L. Bailey, J. B. Richmond and Jos. M. Jackson of Boston and George H. Lanier of West Point, Ga.

The officers were re-elected as follows: W. H. Wellington, president; H. S. Sears, vice president; Jos. M. Jackson, treasurer; S. G. Wellington, secretary, and Robert E. Ligon, general manager.

The out-of-town stockholders in the mills left the city Thursday afternoon going to visit other mills in which they are interested.

Jefferson, Ga.—A suit of much interest is being heard in Chambers at Athens, Ga., this week. Some years ago, W. D. Martin, a rich old bachelor, died at Jefferson and left his fortune as an endowment to the local school, afterwards named Martin Institute, and the Methodist church. When the Jefferson Cotton Mill was organized the endowment funds, \$26,000 in preferred stock was invested for Martin Institute, and \$8,200 for the church. The mill recently went into the hands of a receiver on the petition of the Jefferson Banking company, and J. C. Turner and J. H. Holder made receivers. The suit is to enforce

claims of the bank primarily, but school and church are claiming that they have been treated as common stockholders instead of preferred preferred creditors, and have legally intervened in the proceedings. The case will have further hearing May 31 at Jefferson, as only by court order, were the original subscription lists obtained by the attorneys for church and school.

Anderson S. C.—The annual meeting of the stockholders and directors of the Gluck Mills was held last week. Among the out-of-town stockholders in attendance were: Messrs. C. E. Riley, H. L. Bailey, H. S. Sears and Stanley Morton, all of Boston.

The usual semi-annual dividend of 3 per cent was declared, payable June 3. The report of the president, W. H. Wellington, was read. It showed that the mill had had a very successful year.

The stockholders re-elected the old board, who are as follows: C. E. Riley, W. H. Wellington, H. S. Sears, S. G. Wellington and T. O. Nicholson of Boston, J. R. Vandiver, J. L. Gray, R. S. Ligon and R. E. Ligon of Anderson.

At a meeting of the board of directors held subsequent to the meeting of the stockholders the officers were re-elected for another year, as follows: W. H. Wellington, president; J. R. Vandiver, vice president; Stanley Morton secretary and treasurer and Robert E. Ligon, general manager.

Danville, Va.—The Riverside and Dan River Mills, in their annual statement, show their 1914 earnings to amount to an aggregate of \$507,676. In that year they expended for completion and equipment of mill No. 4 at Dan River, and improvements at the Riverside plant, \$1,380,302. This amount was in addition to ordinary upkeep and renewal. There was deducted from this expenditure \$200,000 for depreciation charges. Dividends were paid at the rate of 6 per cent on preferred stock and 10 per cent on the common. During 1914, preferred stock was sold to the amount of \$1,000,000 at par.

The annual statement is as follows: Assets: Real estate and machinery, including both Riverside and Dan River plants, \$9,648,488.11; stock owned in other companies, \$90,000; bills and accounts receivable, \$1,946,105.17; inventories, stock in process, cotton supplies, etc., \$1,644,572.35; total, \$13,644,169.

Liabilities: Capital stock, preferred, \$5,500,000, common, \$3,000,000; making total of \$8,500,000; surplus \$1,265,877; bills and accounts payable (current) \$3,363,485.71; bills payable due account machinery, 1915, \$148,263.69; bills payable, due account machinery, 1916, \$188,816.09; bills payable, due account machinery 1916, \$191,406.50; bills payable, due account machinery, 1917, \$6,320.35, making total of \$13,644,169.

Headquarters
Southern Textile Association Meeting
JUNE 25th AND 26th
LANGREN HOTEL
Asheville, N. C.

Thursday May 6, 1915.

Mills at Aiken Sold at Auction.

The plants of the Aiken, Langley and Seminole Manufacturing Company, among the largest cotton mills of South Carolina, were bid in at noon Tuesday by William McKinley, Jr., and Charles H. Low, as a committee from the creditors for \$475,000. The individual prices paid were: Aiken Manufacturing Company \$200,000; Seminole Manufacturing Company \$125,000; Langley Manufacturing Company \$150,000. The properties were sold under a Federal court order, the purchases being made in compliance with a plan of reorganization previously made public.

Large Loom Orders.

According to the Boston New Bureau, the Draper Company booked as large aggregate orders for Northrop looms during the first quarter of this year as for any eight months of 1914. The New Bureau also says "In other words Draper Co. has taken orders for close to 12,000 Northrop looms in the first three months of this year. Coming on top of the 7,337 orders on hand on the first of the year, it is evident that Draper already has a full year's business in sight without allowance for bookings during the entire remainder of 1915. At this rate the chances seem very good of 1915 piling up record output and sales if the second half at all approaches the normal. The change in Draper's fortune has been almost as abrupt as it has been with some of the big 'war-order' companies. On January 1, following the poorest year's business in six years as regards sales and with barely four months' bookings ahead, yet Draper now faces the prospects of the best year in its history. It is interesting to note that practically all of Draper's new business has been for 'replacements' and not for new building. The majority of the orders, too, have come from the South."

Six-Course Dinner at Asheville Mills.

The manner in which the Asheville (N. C.) Cotton Mills, with the co-operation of the City Mission Board, trains girls employed at its plant for lives of usefulness was demonstrated when the city mission worker, Miss Ethel Ritchson, in charge of the work, entertained officials of the mill and members of the Board of Missions at a six-course dinner which was thoroughly enjoyed. The dinner was served at Welfare Cottage and was prepared by 12 girls of the domestic science class. Those in attendance expressed themselves as being delighted with the proficiency shown

by the members of the class, which was organized in September.

At Welfare Cottage, on Factory Hill, Miss Ritchson devotes her entire time to the training of the boys and girls who work in the mills for a livelihood.

Virginia Beach Cloth.

At the textile exhibit in Reidsville, last fall, the Leaksville Cotton Mills of Spray made a display of goods intended for Summer wear by men, as well as women. It was then that the "wear cotton" movement was sprung. Mr. E. V. Hobbs, representing the Leaksville Mills, gave assurance through The Observer that this Summer his factory would have something on the market that would prove popular and serve to bring North Carolina manufactured goods into favor. The new cloth is now appearing in Spring suits. It is known as "Virginia Beach" cloth. It is stout of texture, excellent in finish, and in color a little darker than Palm Beach and lighter than khaki. It not only makes a comfortable Summer attire, but quite a stylish one. The Leaksville Cotton Mills has shown what our home factories can do when they try. The Virginia Beach suit ought to spring into instant popularity.—Charlotte Observer.

Cutting Scrape at Mill.

Melvin Pascall of the Fairfield Cotton Mill, Winnsboro, S. C., is in jail, charged with assault and battery with intent to kill. Pascall cut Superintendent J. R. Donaldson and several others with a razor. The affair occurred early Tuesday morning of last week, beginning with a fight between the overseer of weaving and Pascall, in which the latter drew a razor. Mr. Donaldson and several others ran in to stop the fight, and before they could subdue Pascall he had inflicted several cuts on all in reach. Mr. Donaldson received only a slight one on the finger.

American Textile Directory.

We have received a copy of the 1915 American Textile Directory, which has just been issued by Lord & Nagle.

This new edition contains 295 new mills, shows 194 mills out of business since the last edition, and about 4,000 changes made in mill reports.

A new feature added is a list of "Export Commission Houses and Agents Handling American Textile Products."

The book is published in three editions, viz., the Standard Edition, \$2; Office Edition, \$3; Vest Pocket Edition, \$1 per section.

Copies can be supplied by Clark Publishing Co., Charlotte, N. C.



Keeping the Textile Plant Young

Is a problem—the problem that taxes the best in any manager—leads directors to seek the best managers. Its final test is efficiency—in the man and machinery.

THE TURBO HUMIDIFIER

was designed on the idea of plain, old-fashioned efficiency. Something that would keep young a long time; something that would do the work and give busy managers time to think of other problems. We want to talk to you on these lines—and these only.

THE G. M. PARKS CO.

Fitchburg, Mass.

Southern Office Commercial Building, Charlotte, N. C.

J. S. COTHRAN, Manager.

TEXTILE BOOKS

Carding and Spinning, by G. F. Ivey.—Price \$1.00. A practical book on carding and spinning which will be found useful.

Carding Lessons for the Mill Boy—Vaughan—Price \$1.00. A practical carder. Written especially for young carders.

Cotton Mill Processes and Calculations—By D. A. Tompkins—Price \$5.00. An elementary text book for textile schools and self-instruction. Every operation in the ordinary cotton mill is explained simply and with the use of illustrations. Contains much information of value to the experienced man. 395 pages; 33 illustrations; cloth.

Plain Series of Cotton Spinning Calculations—by Cook—\$1.00. A unique and valuable book giving the calculations used in mixing, carding, drawing, and spinning cotton, also original drawings showing points where changes of drafts, speeds, etc., should be made. Setting, production, doublings. 90 pages; freely illustrated; cloth.

CLARK PUBLISHING COMPANY

CHARLOTTE, N. C.

AMERICAN MOISTENING COMPANY

BOSTON, MASSACHUSETTS

WILLIAM FIRTH, President

FRANK B. COMINS, Vice-Pres. and Treas.

THE ONLY PERFECT SYSTEM OF AIR MOISTENING
COMINS SECTIONAL HUMIDIFIER

JOHN HILL, Southern Representative, 1014 Healy Building, ATLANTA, GEORGIA

Cotton Goods Report

New York.—Cotton goods markets held firmly last week, and there was a general broadening in the trading, although the staple print and convertible division of the market showed less activity. Sheetings have been in active demand for bagging and suiting purposes. The demand for drills for converting was also good last week and fancy print and fine goods were stronger and more active.

More business was offered last week on standard lines of staple piece goods for deliveries running into the last half of the year. The volume of trade from day to day increased considerably last week, and would have been greater had manufacturers been willing to enter into longer contracts.

Considerable business was put through in heavy colored cotton goods for bagging purposes. Prices on burlaps have reached such a point that the bag trade is looking for substitutes. Coarse heavy goods require considerable cotton, and raw material prices showing no signs of easing off, manufacturers are conservative in booking long forward contracts, unless they are well covered on the required raw materials. Staple colored goods are in small supply and are being held firmly. Staple dress gingham are now held at the same prices as last year when spot cotton was selling at 13 cents a pound. Standard prints are a quarter cent lower than last years quotations and are considered attractive values in spite of the difference of the cost of cotton last year.

The market on bleached goods continues steady and sales for filling in purposes have been better than at any other similar period for years. Finer grades of bleached cotton goods were bought liberally last week. In some cases, prices on gray goods have run ahead of the price parity on bleached goods, and further advances are looked for on the latter.

Business being done in the ready to wear trade on wash fabrics is said to be better than for any other season on record. Business is coming from retailers as well as large jobbers. A great many suits of cottons and cotton suitings are being ordered, and the orders for delivery this season have come in larger than ever before.

In the gingham market there is a strong disposition noted to order goods now for delivery in the late months of the year. Many mills are declining business of this character, even though it is offered in substantial quantities. The "stuffs" situation is one thing that is holding the mill men back, but the expectation of higher priced cotton is another factor of immediate influence.

In the Fall River print cloth market last week, sales were smaller, and the market was quieter than in other weeks for some time. Prices however, held firmly and the manufacturers continue in a strong po-

sition. The total sales for the week were estimated at about 150,000 pieces. It is not thought that the decreased activity was due to a weakening market. Buyers have been in the market and buying heavily for the last few weeks, and now are rather well supplied for their summer needs. Consequently, their purchases were not so large last week. Manufacturers continue optimistic and insisted on the same prices as a week before. A wide range of styles was covered in last week's trading. There was some business on narrow goods and wide and medium width goods sold fairly well. Trading in fine goods showed distinct improvement.

Prices on cotton goods were quoted in New York last week as follows:

Print cloth, 28-in. std	3 1-4	—
28-inch, 64x60s	3 1-8	—
Gray goods, 39-inch,		
68x72s	5	5 1-4
38 1-2-in., 64x64s	4 3-8	—
4-yard, 80x80s	6 1-4	6 1-2
Brown drills, std.	6 1-4	7
Sheetings, So. std.	6 1-4	6 1-2
3-yard, 48x48s	5 7-8	6
4-yard, 56x60s	5	—
4-yard, 48x48s	4 3-4	—
4-yard, 44x44s	4 5-8	—
5-yard, 48x48s	3 3-4	—
Denims, 9-ounce	13	15
Selkirk, 8-oz. duck	10 1-2	—
Oliver Extra, 8-oz.	10 1-2	—
Hartford, 11-oz., 40-in.		
duck	12 3-4	—
Ticking, 8-ounce	11 1-2	—
Standard prints	5	—
Standard gingham	6 1-4	—
Fine dress gingham	7 1-2	9 1-4
Kid finished cambrics	4	4 1-4

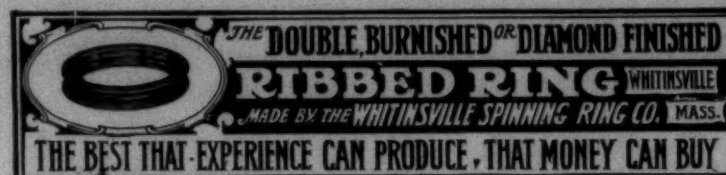
Hester's Weekly Cotton Statement.

Comparisons are to actual dates not to close of corresponding weeks.

In sight for week	177
In sight same 7 days last y'r	110
In sight for the month	923
In sight same date last y'r	467
In sight for season	14,188
In sight same date last y'r	14,352
Port receipts for season	9,966
Port receipts same date last year	10,244
Overland to mills and Canada for season	993
Overland same date last y'r	1,080
Southern mill takings for season	2,596
Southern same date last y'r	2,748
Interior stocks in excess of Sept. 1st	634
Interior last year	300
Foreign exports for week	147
Foreign same 7 days last y'r	72
Foreign for season	2,485
Foreign same date last y'r	8,207
Northern spinners' takings and Canada for week	53
Northern same 7 days last y'r	372
Northern for season	2,521

Statement of spinners' takings of American cotton throughout world:

This week	4,680
Same 7 days last year	2,290
Total since Aug. 1	10,481
Same date last year	12,382
Statement of world's visible supply:	



Poor Tempering Does It { Makes broken travelers and cut threads

U.S. RING TRAVELERS ARE **AMOS M BOWEN**
UNIFORMLY TEMPERED Treasurer
PROVIDENCE, R.I.

MATTHIAS OUSLEY, Jr., Southern Representative, Box 126, Greenville, S. C.

RICHARD A. BLYTHE

(INCORPORATED)

Cotton Yarns Mercerized and Natural

ALL NUMBERS

505-506 Mariner and Merchant Building

PHILADELPHIA, PA.

The Desirability of the South

as the place to manufacture cotton goods is illustrated in the increase of 67% quoted by census department. We can offer attractive situations for those desiring to enter this field.

J. A. PRIDE

General Industrial Agent, Seaboard Air Line Railway

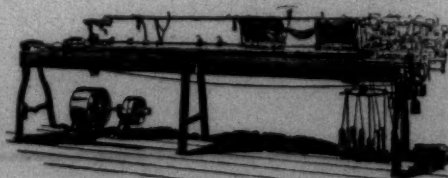
NORFOLK, VIRGINIA.

IMPROVED INMAN AUTOMATIC BANDING MACHINES

MANUFACTURED BY

COLE BROTHERS

PAWTUCKET, R. I.



Also Beaming Machine to beam on to slasher beams.

The only automatic machine in the world for making loop bands for spinning frames. Superior quality of bands without any cost of making. All bands exactly alike and no stretch of bands after they are put on. Saves child labor.

Total visible this week	7,219	last year	3,295
Total visible last week	7,476	All other kinds this week	1,863
Total visible same date last year	5,287	All other kinds last week	1,815
Of this the total American	5,376	All other kinds last year	1,992
this week	5,376	Visible in the U. S. this week	2,127
Of this the total American	5,661	Visible this date last year	1,090
last week	5,661	Visible in other countries this week	5,113
Of this the total American		Visible this date last year	4,197

The Yarn Market

Philadelphia, Pa.—Business in the yarn market was better last week, a good volume of new business being done and deliveries on old contracts being better. With the closing of the month, many dealers said that April was the best month in the yarn trade since last September, both in point of new business done and deliveries made.

The knitting trade is showing a gradual but steady improvement, due to the increase sale of yarns for spot deliveries on old contracts. The orders which knitters are getting are not very large, but they are coming in steadily. They believe that business during the summer months will be good, basing their opinion on the general improvement in the whole industrial situation.

Prices on carded knitting yarns continue to be rather irregular. Last week there was a good demand for some numbers for spot delivery. Sales of 8s to 12s were made on the basis of 15 1-2 cents for 16s, spot and prompt delivery. Other sales were made on the basis of 15 1-4 to 17 cents for 10s. Southern frame spun cones for quick delivery as follows: 24s at 19 and 19 1-2 cents, 26s for 19 1-2 and 20 cents, 30s for 20 and 20 1-2 cents. Sale of 21s for future delivery were made at 20 and 20 1-4 cents.

While business on single combed yarns was not very brisk last week, there were some sales of 10s of 25,000 to 100,000 pounds. Mercerizing plants are reported to be doing a good business and mercerized yarns have advanced from 3 to 5 cents a pound.

There were some sales of 20,000 to 100,000 pounds of weaving yarn, with delivery running well into the fall, made during the week, but general weavers did not buy freely, as a great many of them have sufficient yarn in stock to last from three to five months and they are doubtful of the stability of prices at the present level.

Southern Two-Ply Skeins.

4s to 8s	15 1-2-16
10s to 12s	10 1-2-17 1-2
14s	—17
16s	16 1-2-17
20s	18 —18 1-2
24s	—19 1-2
26s	19 1-2-20
30s	—21
36s	24 1-2-25
40s	26 1-2-27
50s	—34
3-ply 8s, upholstery	—16 1-2
4-ply 8s, upholstery	—16 1-2

Southern Single Skeins.

4s to 8s	15 —15 1-2
10s	15 1-2-16
12s	16 —16 1-2
14s	—16 1-2
16s	16 3-4-17
20s	18 —18 1-2
22s	—18

Southern Single Chain Warps.

10s to 12s	15 1-2-16
14s	16 —16 1-2
16s	—17
20s	18 —18 1-2
22s	18 —18 1-2
24s	18 1-2-19
26s	—19
30s	—21
40s	20 —27

Southern Two-Ply Chain Warps.

8s to 10s	16 —17
12s to 14s	17 —17 1-2
2-ply 16s	17 1-2-18
2-ply 20s	18 1-2-19
2-ply 24s	—19 1-2
2-ply 26s	19 1-2-20
2-ply 30s	—21
2-ply 40s	—27
2-ply 50s	—35

Southern Frame Cones.

8s	—15 1-2
10s	16 —
12s	16 1-2—
14s	16 3-4—
16s	17 1-4—
18s	17 3-4—
20s	18 —
22s	—18 1-2
24s	18 —
26s	19 1-2—
30s	20 —20 1-2

Eastern Carded Cops.

10s	17 —
11s	17 1-2—
12s	17 1-2—
14s	18 —
16s	18 1-2—
18s	18 3-4—
20s	19 1-2—
22s	20 1-2—
24s	21 —
26s	22 —
28s	23 —
30s	24 —

Two-Ply Carded Peeler Skeins.

22s	21 1-2-22
26s	23 —
30s	24 —
36s	25 —
40s	27 —
50s	36 —37

Carpet and Upholstery Yarns in Skeins.

9-4 slack	17 —
8-4 slack	16 1-2—
8-3-4 hard twist	14 1-2-15

Elmira Mills.

Burlington, N. C.

R. A. Fitch	Supt. and Weaver
John Ward	Carder
Chas. Jones	Spinner
G. M. James	Dyer
A. A. Apple	Bookkeeper

Our Textile Industry and Europe's Calamity.

(Continued from Page 8.)

present systems throughly good merchandising.

It seems almost impossible for even some of the newer concerns to understand that study of market conditions, ways of putting up fabrics and requirements of buyers means either a continuous, profitably operated plant or low prices for both preferred or common stock and an intermittent market.

There is no reason on the face of the matter that the men in our larger cities, who have gained all their experience of cloth and yarn with experience in buying and selling, should have the monopoly of all information valuable to a mill, and it behooves us, before the rush and hurry that will result when it is exactly known how small a proportion of the retail dealers' wants can be supplied from the other side, to master, or to undertake to master, the science of properly furnished material to the buying trade. It cannot be learned in New York altogether, or in any of our primary markets. It may require more time perhaps than we are accustomed to give to the mastery of detail at the plant, but it is the only thing that in the long run will succeed in removing once for all the bugbear which seems to confront at recurring intervals every plant that is engaged in textiles, either once in five or ten or less years.

The study of merchandizing has not been followed in this country carefully, and it is open to question whether it has been mastered in Europe, but there is no real reason why any artificial restrictions should stop the flow of products to the consumer or the demand from the general public for the labor of every man and woman and minor in manual labor.

It certainly behooves us, as a nation that will largely profit by the peculiar conditions that this war has produced, to put before us the ideal of a continuous, good trade, obtained not by exploiting other firms or individuals, but by supplying the best of goods at a fair price to satisfy customers.

Cotton Goods Trade of Russia.

During the spring season (December, 1914, to February, 1915) the cotton-goods trade of Russia was affected less by the seasonal demand than by the high prices ruling, the advances following each other at very short intervals on December 15, January 2, January 15, and February 3. But the business in December, January, and February did not turn out, despite the high prices, to be less than in the corresponding period of the preceding season, not including shipments to the Government, which, in view of the demand for shirtings, cloths, and moleskins has recently absorbed over 1,000,000 pieces per month. In the wholesale trade the total absence of foreign imports of goods was also a favorable factor, in consequence of which retail traders were forced to cover their requirements with Russian goods of high quality. Despite the trying time

The successful manufacturer instantly installs the machine or attachment that increases the efficiency of labor.

Then why not install a KEY to efficient COST finding—

Ask

Simplex Textile Cost Company,
Charlotte, N. C.

and the scarcity of dyes, the quality and selection in the textile goods did not suffer. The conditions had no influence on the provision of seasonable novelties, partly because such goods had been secured before the war. The retail trade expressed in rubles was not inferior to that of the previous year, although quantitatively it was smaller owing to the higher prices.

As regards the future, there is little doubt that Moscow manufacturers are approaching spring with stocks of goods reduced to a minimum. At the beginning of the war production was greatly reduced, the sales being only little behind those of the previous year, and the stock of goods was insufficient for meeting a large demand. The spring break in the weaving sheds will naturally depend chiefly on local conditions, but in the majority of instances work in the mills will not be resumed until early in May. Moreover, the output will be restricted by the scarcity of raw material and of dyes. This means that new goods can not reach the market until after the middle of May, and it is reasonable to suppose that at that time goods on the market will be extremely scarce. By the middle of May there should be much interest shown in summer goods.—Consular Reports.

Use of Vermillion Pigment in India.

The valuable scarlet pigment vermillion is much used in India for religious ceremonial and other social customs by the Hindus. A married woman is always marked with it on the forehead. It appears in the emblem of Vishnu on the followers of that deity. It is also used for temple decorations, though not so largely for the latter purpose as by the Chinese, who use it in great profusion for the adornment of their temples and dwelling houses. It is probably owing to this extensive use of it in China that it is so largely manufactured there, and notwithstanding the extremely crude method of preparing it—of excellent quality. The Chinaman is somewhat thorough in his methods and will not use adulterated vermillion, contrasting in this with the Hindu, who is often content with a more or less impure pigment.

The apparent apathy of the Indians in securing the profits of an article so largely used by them is probably due to a fear of the difficulties which they suppose to attend its manufacture.—Consular Reports.

Personal Items

J. E. Carter has resigned as overseer of weaving at the Dacotah Mills, Lexington, N. C.

J. T. McGregor, superintendent of the Florence Mills, Forest City, N. C., was a Charlotte visitor last week.

John W. Trigg, overseer of weaving at Merrimack Mills, Auntsville, Ala., has purchased a five passenger touring car.

David Hayes Commits Suicide.

David Hayes, 28 years old, an operative at the Peerless Woolen Mills, in Rossville, Ga., committed suicide early Friday afternoon by shooting himself through the temple. The tragedy occurred in Hayes' room in the home of Charles Bond, on Chickamauga avenue, Rossville. Despondency over family misfortunes and ill-health are thought to have been his reason for the act.

Presented With Gold Watch.

The esteem in which the employees of the LaFayette Cotton Mills held W. A. Nichols, who has resigned as secretary and treasurer, was shown Tuesday when he was presented with a handsome gold watch chain, J. B. F. Jones acting as spokesman for the employees. Mr. Nichols was deeply touched by the gift and in a brief speech expressed his appreciation.—Walker County Messenger.

Killed by Elevator.

Clarence Edwards, 14 years old, was killed by being crushed with an elevator in the Aragon Cotton Mill, at Aragon, Ga., while at work on the night shift of the mills.

The funeral and interment were held Wednesday afternoon at Cedar Creek, 30 miles from Aragon.

Cylinder-Head Blows Out; Mills Closed.

The Delgado Cotton Mills, Wilmington, N. C., employing 300 operatives, has been closed down since Friday afternoon at 2 o'clock, when the piston gave away causing the cylinder head to blow out and will not be ready to resume work for several days. The cause of the mishap is not known. The engineer and two other persons in the engine room at the time had narrow escapes. The cylinder-head was sent with terrific force across the room and tore away a number of brick in the wall.

Three Injured By Explosion.

The slasher cylinder in the Erwin Cotton Mills of West Durham exploded Thursday morning, April 22, and seriously injured Jonas Hall, painfully injured George Gunter, and slightly injured J. R. Jones. The cause of the explosion was that the steam indicator on the slasher was taken off for repairs and they could not tell how much steam was in the boiler and allowed the pressure to get to strong.

SPINNING RINGS ^{Best} Quality Guaranteed

Also Manufacturers of Drop Wires

The Connecticut Mill Supply Co.,

Woodbury, Connecticut

Southern Representatives, PEARSON & RAMSAUR, Greenville, S. C.

You Can Reduce Weaving Costs

Send us a worn shuttle with completely filled bobbin and state kind of goods woven and name of loom. These will explain your needs and help us to design an efficiency shuttle for your requirements. This shuttle has the approval of loom builders and weaving experts. It should help you to weave better fabric at a lessened expense.

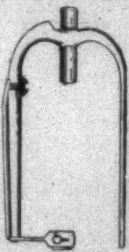
SHAMBOW SHUTTLE COMPANY

Woonsocket, R. I.

W. H. Monty, Pres. & Treas. W. H. Hutchins, V.-Pres & Sect'y

SOUTHERN SPINDLE AND FLYER COMPANY

CHARLOTTE, N. C.



Are your flyers giving you trouble? If you have a few old flyers around your mill that will not run, send them to us and we will make them run like new ones, or if you are changing on to a finer or coarser roving, we will re-block your flyers to suit your work at small cost.

SCOTCH SIZE OR KLEISTER



THIS IS an old preparation, well known to the majority of Cotton Manufacturers, on account of the general satisfaction it has always given. A binder for both fine and coarse counts as it combines readily with any starches, lays the surface fibre and holds the size well on the yarn. Manufacturers of exports and denims find it valuable, as it reduces shedding and loom waste to a minimum. Should use Raw Tallow or Soluble Tallow in addition. Write for formula.

ARABOL MANUFACTURING COMPANY

100 William Street, New York

CAMERON MacRAE Southern Sales Agent CHARLOTTE, N. C.

PROPER LOCATIONS FOR MILLS.

United States Census figures show that since 1880 the consumption of cotton in mills of the cotton growing States has increased 1,502 per cent, as compared with an increase of only 93 per cent in all other states. In the twelve months ended August 31, 1914 Southern mills consumed 162,097 more bales of cotton than the mills of all other States. Three-fourths, or 9,000,000, of the total cotton spindles in the cotton growing States are tributary to Southern Railway tracks. Of the 200 knitting mills in the South over 125 are located along the Southern Railway. Nearly all the Southern woolen and silk mills are also on Southern Railway tracks.

There is a reason for this, and it is not difficult to understand.

The Southern Railway Lines enter and serve most completely those portions of the South where the textile industry is the greatest success, because there are found all the conditions which makes for successful manufacture—the proper transportation facilities, the ease with which the raw material and the needed fuel may be secured, the supply of good labor, the pure water, the low cost of power, and favorable local conditions.

Not only for textile plants but for all other industries the best advantages will be found in this territory.

If you have a plant to locate, let us take up with you the question of the proper location. Your plans will be held confidential. Our knowledge of conditions at various points and our experience in locating other mills and the time of our agents in making special investigations are at your service if desired.

M. V. RICHARDS, Industrial and Agricultural Commissioner,
Southern Railway,

Room 129,

Washington, D. C.

The "Little Boss."

(Continued from Page 9.)

time lost all ambition to try to rise to a better position and begins to lose interest in his work. Must he stay on and take the insult that has been heaped upon him or must he try his luck at some other mill where the conditions are likely to be similar to the ones he now has to endure.

Such is the other side of the question and I am sure that I have not overstated the facts in regard to the Big Boss' attitude toward his little bosses in a large number of our mills. I am glad to say that there are a few Big Bosses who can and do appreciate a man's true worth, but I do think that when a man has improved the production and quality of the mill's product he should receive part of the increased profits in his pay envelope.

W. H. O.

When You Order Loom Pickers think of "Garland" Quality.

No better rawhide can be obtained than that of which our rawhide loom pickers are made.

The hides are cured for us in England by one of the largest and best known curers in the world and we have absolutely the first selection from his stock. The best material and skillful workmanship are bound not only to produce the best results, but to maintain the standard of quality for which our rawhide loom pickers are so well known.

Remember, we guarantee every Picker.

Garland Mfg. Co.



Saco
Maine

Want Department

Want Advertisements.

If you are needing men for any position or have second hand machinery, etc., to sell the want columns of the **Southern Textile Bulletin** afford the best medium for advertising the fact.

Advertisements placed with us reach all the mills and show results.

Employment Bureau.

The Employment Bureau is a feature of the **Southern Textile Bulletin** and we have better facilities for placing men in Southern mills than any other journal.

The cost of joining our employment bureau is only \$1.00 and there is no other cost unless a position is secured, in which case a reasonable fee is charged.

We do not guarantee to place every man who joins our employment bureau, but we do give them the best service of any employment bureau connected with the Southern textile industry.

Belting From Dismantled Mill.

The following belting is for sale cheap. It is from a dismantled mill and has been overhauled and reworked by a belt manufacturing company. Condition very good.

21 feet 1½-inch single.
2205 feet 2-inch single.
444 feet 3-inch single.
23 feet 5-inch single.
57 feet 6-inch double.
95 feet 7½-inch double.
72 feet 8-inch double.
21 feet 3-inch double.
23 feet 5-inch double.

Prices low. Terms strictly cash on delivery.

Address Belting,

Care Southern Textile Bulletin.

Weavers Wanted.

Wanted.—Weavers for a night run. New Draper looms on plain work. Run five nights and pay for six. Pay off every week. Good running work and good wages. Do not pay transportation. Can also furnish work for a few spinners. Write Supt. Kershaw Cotton Mill, Kershaw, S. C.

Napper for Sale.

For Sale—One Borschers napper 84 inches wide. Been run only a short time. Clothing in good condition. Hamilton Carhartt Mills, Rock Hill, S. C.

Spinning Room Help Wanted.

We can give employment to several families, consisting mainly of spinners, spoolers, etc., in our new mill just started. Address Supt., Lancaster Cotton Mills, Lancaster, S. C.

Spinning Rings Wanted.

Want 3,500 used 1 3-4-inch spinning rings with holders for 2-inch bore ring rail. Whiting preferred. Will exchange 1 5-16 rings and holders. Address Box 91, Winston-Salem, N. C.

Denn Warper For Sale.

For Sale.—Denn Warping Machine made by Globe Machine Works, Frankford, Pa. 2250 ends, electric stop motion, double linkers. Machine in first class condition. Apply to Fitzgerald Cotton Mills, Fitzgerald, Ga.

WANT position as master mechanic. Have long experience in cotton mill work and am entirely competent. Can furnish satisfactory references. Address No. 1049.

A PRACTICAL mill man wants position as superintendent. Small yarn mill preferred. Would accept position as carder and spinner in large mill. Now employed but can change on short notice. Best of references as to character and ability. Address No. 1050.

WANT position as superintendent of 10,000 to 20,000 spindle mill in N. C. or S. C. Age 48. Have 30 years experience on a wide variety of white and colored goods. Have been superintendent 20 years. Strictly sober. Good references. Address No. 1051.

WANT position as superintendent or overseer of large card room. Can furnish all former employers as references and can get results. Address No. 1052.

WANT position as superintendent. Have had 18 years experience as superintendent and can furnish best of references. Address No. 1053.

WANT position as superintendent. Have had 18 years experience as superintendent. Held last position 10 years. Can furnish first class references. Address No. 1054.

WANT position as superintendent or carder and spinner in large mill. Am a practical mill man, experienced in some of the best mills in the South, and can get results. Address No. 1055.

WANT position as overseer of weaving. Am young man of 32 years with family. Have had splendid training and can give satisfaction. My references as to character and ability are good. Address No. 1056.

WANT position as overseer of weaving at not less than \$4.00 per day. Am now employed and can give present employers as references. Address No. 1057.

WANT position as superintendent. Now employed as overseer of carding in one of the best mills in the South, but desire superintendents job. Have made good here and can furnish best of references. Address No. 1058.

WANT position as superintendent, overseer of weaving or traveling salesman. Have experiences in such positions and can furnish references. Address No. 1059.

WANT position as roller coverer. Have had long experience and can do first-class work. Would like to correspond with any mill considering a change of men. Address No. 1060.

WANT position as overseer of spinning and winding. 19 years experience in spinning and winding. Age 30. Employed as overseer at present. Can furnish good references. Address No. 1061.

WANT position as engineer, master mechanic or electrician. Have had 17 years experience with all kinds of boilers, engines, etc. 12 years experience in cotton mill machine shops. Good references. Address No. 1062.

WANT position as superintendent. Have had long experience on both coarse and fine numbers and can furnish best of references both as to character and ability. Now employed as superintendent. Address No. 1063.

WANT position as superintendent of yarn mill or overseer of carding. Have had experience in first-class mills and always gave satisfaction. Best of references. Address No. 1064.

WANT position as superintendent of yarn mill or as carder and spinner. Now employed but prefer to change. Can furnish all former employers as reference. Address No. 1065.

A SOUTHERN man now employed as superintendent wishes to correspond with a mill that needs a superintendent who can get results. Age 36. Married. Have held present position nine years. Gilt edge references. Correspondence confidential. Address No. 1066.

WANT position as overseer of spinning and winding. Age 26. Married. Strictly sober. Long experience and good references. Address No. 1067.

WANT position as master mechanic or machinist at not less than \$2.00 per day. Now employed and have long experience in cotton mill machine shops. Good references. Address No. 1068.

WANT position as superintendent or overseer of large weave room. Now employed as overseer of weaving and giving satisfaction, but want larger job. Fine references. Address No. 1069.

WANT position as superintendent. Long experience, especially on fine combed yarns. Can furnish references from former employers. Address No. 1070.

PATENTS

Trade Marks and Copyrights

Send your business direct to Washington. Saves time and insures better service.

Personal Attention Guaranteed

30 Years Active Service

SIGGERS & SIGGERS

Patent Lawyers

Suite 34 N. U. Washington, D. C.

POSITION WANTED as superintendent by practical man. Have 14 years experience as superintendent and thoroughly understand all details connected with the manufacturing of cotton. Can give A-1 references as to ability and character. Address No. 1071.

WANT position as overseer of weaving. Now employed, but want larger mill. Good experience and satisfactory references. Address No. 1072.

WANT position as superintendent. Have had long experience and have handled some of the most successful mills in the South. Can furnish good references and get results. Address No. 1073.

WANT position as overseer of weaving at not less than \$3.00 per day. Am now overseer and have run present job for three years but for good reasons prefer to change. Address No. 1074.

WANT position as overseer of spinning or carding and spinning in a medium-size mill. Prefer a place in South Carolina or Georgia. Prefer a weave mill on sheeting or drills. At present employed. Health of family reason for changing. Address No. 1075.

WANT position as master mechanic or engineer. 20 years experience in cotton mill steam plants and shops. Now employed and giving satisfaction. Can furnish good references. Address No. 1076.

WANT position as overseer of spinning. Now employed and giving satisfaction but prefer larger job. Long experience and fine references. Address No. 1077.

WANT position as superintendent. Have had long experience as carder, spinner and superintendent. Can furnish first-class references from present and former employers. Address No. 1078.

WANT position as superintendent. Now employed and giving satisfaction, but prefer to change. Special experience on combed yarn. Can furnish best of references. Address No. 1079.

WANT position as overseer of weaving. Have had long experience and can furnish best of references. Now employed. Address No. 1080.

WANT position as superintendent of small mill, or overseer of spinning in large mill. Am now employed but want to change for larger job. Address No. 1081.

WANT position as overseer weaving. Experienced on both white and colored work and on all makes of looms. Can furnish excellent references. Address No. 1082.

WANT position as superintendent or as carder and spinner. Experienced in both yarn and weaving mills, and can give satisfaction. Am now employed, but would change for larger mill. Address No. 1083.

WANT position as overseer of spinning. An Eastern man and an A-No. 1 spinner. Have had many years experience on all kinds of yarns, including novelty yarns of all descriptions. Best references. Address No. 1084.

WANT—Position as overseer weave room. Am good designer and have had eight years experience in weave room. Can give good references as to character and ability. Address No. 1085.

WANT position as overseer of spinning at not less than \$2.50 per day. Have long experience and am a good manager of help. Good references. Address 1086.

WANT position as superintendent of cloth mill, 10,000 to 25,000 spindles, have a number of years experience in carding and spinning. Now employed as overseer spinning in large mill. Married and strictly sober. Age 30 years. Technical graduate in cotton manufacturing. Would consider reasonable salary. Good references as to character and ability. Address No. 1087.

WANT position as overseer of carding in Piedmont section of North or South Carolina, preferably Greenville, S. C. Have had long experience and can furnish best of references. Address No. 1088.

WANT position as superintendent. Have had long experience as superintendent and am capable of handling any size job. Age 45. Can give excellent references. Now employed as superintendent. Address No. 1090.

WANT position as superintendent of small mill or overseer of carding in large mill. Held last position as overseer of carding in large mill for over three years. Can furnish good references. Address No. 1091.

WANT position as superintendent of small mill where I can invest part of my salary. Have long experience as overseer of carding and am now employed as such, but want place as superintendent. Age 35, good habits. Excellent references from present employers. Address No. 1092.

WANT position as overseer of cloth room. Have ten years experience as overseer of cloth room on white and colored, finished and unfinished goods. Now employed but wish larger job. Age 35, sober, accurate and reliable. Satisfactory references. Address 1093.

WANT position as overseer of carding. Have had long experience in first-class mills and can furnish good references from former employers. Address No. 1094.

WANT position as superintendent. Prefer a yarn mill. Have had long experience and can furnish the best of references from former employers. Address No. 1095.

WANT position as superintendent of either yarn or weave mill or carder in large mill. Now employed, but want larger job. Good experience and references. Address No. 1096.

WANT position as overseer of spinning. Would accept position as second hand in large room. Have had good experience and can furnish best of references. Address No. 1097.

WANT position as overseer of spinning at not less than \$3.00 per day. Now employed but prefer to change. Good references both as to character and ability. Address No. 1098.

WANT position as superintendent. Am expert on fine as well as class yarns for all purposes. Know how to make dividends. Can furnish best of references. Address No. 1099.

WANT position as superintendent of small mill or as carder and spinner. Have had long experience and can furnish best of reference. Address No. 1100.

WANT position as superintendent or carder and spinner. Have had charge of carding and spinning in large mill and gave satisfaction. Good references. Address No. 1101.

WANT position as overseer of carding. Have had four years experience and can give present and past employers as reference. Married and sober. Address No. 1102.

WANT position as superintendent or overseer of weaving. Long experience in both positions. Can furnish best of references. Address No. 1103.

WANT position as overseer of carding. Have had 15 years experience in carding and spinning. Am at present overseer of carding, but wish larger job. Good references. Address No. 1104.

WANT position as overseer of weaving. Now employed but prefer to change. Can give satisfactory references. Address No. 1105.

WANT position as overseer of carding. Now employed in a small mill but am capable of handling a larger job. Can give best of references. Address No. 1106.

WANT position as engineer and master mechanic. Age 47. Have had 25 years experience in cotton mill steam plants. Can furnish good references. Address No. 1107.

WANT position as overseer of weaving. Have run large rooms and

have very wide experience. Can give former employers as references. Address No. 1108.

WANT position as superintendent. Have had long experience and always give satisfaction. Reason for changing better salary. Age 45. Married. Strictly sober. Experienced from ground up on both white and colored work. Address No. 1109.

WANT position of overseer of carding. Experienced on combers and double carding and have always give satisfaction. Best of references. Address No. 1110.

WANT position as overseer of weaving in large mill or superintendent of ten or twenty thousand spindle weaving mill. Experienced on both heavy and fine goods, plain and fancy. Now employed. Good references. Address No. 1111.

WANT position as overseer of large card room or as assistant superintendent. Now employed but would change for larger job. Good references. Address No. 1112.

WANT position as overseer of weaving. Have had long experience on Draper, Stafford and plain looms. Can furnish best of references. Address No. 1113.

WANT position as overseer of spinning or carding and spinning. 14 years in mill, 8 years as overseer. Age 30. Married. Experienced on both white and colored work. Address No. 1114.

WANT position as overseer of large card room or as assistant superintendent. Now employed but would change for larger job. Long experience in both. Nothing less than \$2.50 considered. Good references both as to character and ability. Address No. 1115.

WANT position as superintendent. Would like to figure with any mill that is not getting results. Can furnish references and can change on short notice. Age 37. Address No. 1116.

A THOROUGHLY COMPETENT cotton mill man desires position as superintendent or manager, one who has had long practical experience on all classes of cotton goods in Northern mills. Good organizer and manager, 42 years of age and married. Best of references. Address No. 1117.

WANT position as superintendent of yarn mill. Long practical experience on all classes of yarns from 4s to 180s. Also experienced on automobile tires and similar fabrics. Address No. 1118.

WANT position as overseer of weaving in small mill or second hand in large room. Age 32. Have 15 years experience. Can furnish good references. Address No. 1119.

WANT position as superintendent. Now superintendent of small mill and giving satisfaction but want larger job. Was overseer of carding for many years. Fine references. Address No. 1120.

WANT position as superintendent. Now employed and have been on present job many years, but want larger mill. Can furnish best of references. Address No. 1121.

WANT position as chief engineer and master mechanic. Age 36. Have ten years experience and am not afraid of work. Have family of mill help. Good references. Address No. 1122.

WANT position as carder in large mill or superintendent in small or medium size yarn mill. Am now employed but prefer to change. Address No. 1123.

WANT position as superintendent or as overseer of large weave room. Have had long experience in both positions and can give former employers as references. Address No. 1124.

WANT position as master mechanic. 20 years experience and can furnish fine references. Have 2 doffers and 1 spinner. Strictly sober. Address No. 1125.

WANT position as superintendent of yarn mill or superintendent of large spinning room. Have 23 years experience as carder and spinner 18 years of which have been overseer. Strictly sober. Now employed. Good references. Address No. 1126.

WANT position as superintendent. Many years experience. Have been superintendent of two of the most successful mills in the South. Can furnish best of references. Address No. 1127.

WANT position as overseer of weaving. Have had 14 years experience as overseer on all kinds of work, both white and colored. Am 41 years old. Can furnish references as to ability and character. Address No. 1128.

WANT position as superintendent of yarn mill (hosiery or weaving yarns) or carder in good size mill. Age 39. Married. 7 years experience as carder. 5 years as superintendent. Can furnish good references. Now employed. Address No. 1129.

A THOROUGHLY COMPETENT and energetic young superintendent 30 years of age wants larger position. Am practical and capable of giving you good service on either plain, fancy or colored goods. Will be pleased to submit reference and correspond with any good size mill wanting a man. Address No. 1130.

A PRACTICAL weaver now employed wants to make a change. Age 34. Strictly sober. Can run a job and get results. Nothing less than \$3.00 per day will be considered. Address No. 1131.

WANT position as carder. Am now employed as carder and know how to watch my costs and my room. Reason for wanting to change will be furnished upon request. Address No. 1132.

CLASSIFIED LIST OF ADVERTISERS

AUTOMATIC BANDING MACHINES

Cole Bros.

AUTOMATIC MAGAZINES—

Hopedale Mfg. Co.

BALING PRESSES—

Boomer and Boschert Press Co.
Saco-Lowell Shops.

BEAMERS—

T. C. Entwistle Co.
Saco-Lowell Shops.

BELTING—

American Supply Co.
Bradford Belting Co.
Graton & Knight Mfg. Co.
Philadelphia Belting Co.

BOBBINS AND SPOOLS—

American Supply Co.
Draper Co.

BRUSHES—

D. D. Felton Brush Co.

CARD CLOTHING—

W. H. Bigelow.
Jos. Sykes Bros.
Saco-Lowell Shops.

CARDS—

Potter & Johnston Machinery Co.
Saco-Lowell Shops.

CLOTH ROOM MACHINERY—

Woonsocket Machine and Press Co.
Saco-Lowell Shops.

COMMISSION MERCHANTS—

Richard A. Blythe.

DOBBIES—

Crompton & Knowles Loom Wks.
Mason Machine Works.
The Stafford Company.

DOFFING BOXES—

Diamond State Fibre Co.

DRAWING FRAMES—

Saco-Lowell Shops.
Woonsocket Machine and Press Co.

DRAWING HOLLS—

Metallic Drawing Roll Company.

DRINKING FOUNTAINS—

Puro Sanitary Drinking Fountain Co.

DROP WIRES—

Connecticut Mill Supply Co.
Hopedale Mfg. Co.

DYESTUFFS AND CHEMICALS—

American Dyewood Co.
Arabol Mfg. Co.
Bosson and Lane.
Cassela Color Co.
John P. Marston.

Faberwerke-Hoechst Co.

A. Klipstein & Co.
Seydel Manufacturing Co.
So. Dyestuffs & Chemical Co.

DYEING, DRYING, BLEACHING AND FINISHING MACHINERY—

Philadelphia Tex. Machinery Co.
C. G. Sargents Sons.
Saco-Lowell Shops.

DYERS—

Gibson Mfg. Co.

ELECTRICAL MACHINERY—

General Electric Co.
Westinghouse Electric Co.

FIRE HOSE AND FITTINGS—

American Supply Co.

FLYER PRESSERS—

Southern Spindle & Flyer Co.

GRID BARS—

Alfred Armfield.

HUMIDIFIERS—

American Moistening Co.
Stuart W. Cramer.
G. M. Parks Co.

HUMIDIFYING MACHINES—

C. G. Sargents Sons Corp.

LOOMS—

Crompton & Knowles Loom Works.
Draper Company.
Saco-Lowell Shops.
Stafford Company.

LOOM HARNESS, REEDS AND PICKERS—

American Supply Co.
Garland Mfg. Co.
Graton & Knight Mfg. Co.

LUBRICANTS—

Albany Lubricating Co.
Masury, Young Co.

LUG STRAP—

Graton & Knight Mfg. Co.
M. M. Lahue & Co.

MILL CRAYONS—

American Supply Co.

MILL SUPPLIES—

American Supply Co.
Connecticut Mill Supply Co.
Diamond State Fiber Co.

OVERHAULERS—

Southern Spindle & Flyer Co.

PAINTS—

Benj. Moore & Co.

PICKERS AND LAPPERS—

Potter & Johnston Machinery Co.
Saco-Lowell Shops.

PREPARATORY MACHINERY—

Fales and Jenks Machine Co.
Saco-Lowell Shops.

PRESSES

Boomer and Boschert Press Co.

POWER TRANSMISSION MACHINERY—

Woonsocket Machine and Press Co.

PUMPS—

Stuart W. Cramer.

RAILROADS—

U. C. & O. Railway.

Seaboard Air Line.
Southern Railway.

RING SPINNING FRAMES—

Fales and Jenks Machine Co.
Saco-Lowell Shops.

RING TRAVELERS—

American Supply Co.
U. S. Ring Traveler Co.

ROLLS—

American Supply Co.
Metallic Drawing Roll Co.
Saco-Lowell Shops.
Southern Spindle & Flyer Co.

ROVING CANS—

Diamond State Fibre Co.

ROVING MACHINERY—

Saco-Lowell Shops.
Woonsocket Machine and Press Co.

SADDLES—

Dixon Lubricating Saddle Co.
Graphite Lubricating Co.

SEPARATORS—

Draper Company.

SHUTTLES—

Shambow Shuttle Co.

SIZING COMPOUND—

Arabol Mfg. Co.
John P. Marston.
A. Klipstein & Co.
Keever Bros. Co.
Seydel Mfg. Co.
So. Dyestuff & Chemical Co.

SLASHERS—

Saco-Lowell Shops.

SOAPS—

Keever Bros. Co.
Seydel Mfg. Co.

SOFTENERS—COTTON—

Arabol Mfg. Co.
New Brunswick Chemical Co.
A. Klipstein & Co.
Seydel Mfg. Co.
So. Dyestuff & Chemical Co.

SPINDLES—

Chapman Gravity Spindle Co.
Draper Company.
Dixie Spindle & Flyer Co.
Southern Spindle & Flyer Co.

SPINNING RINGS—

Connecticut Mill Supply Co.
Draper Company.
Whitinsville Spinning Ring Co.
Pawtucket Spinning Ring Co.

SPOOLERS—

Draper Co.
Easton and Burnham Machine Co.
Saco-Lowell Shops.

STARCH—

Corn Products Refining Co.
Keever Bros. Co.
Keever Starch Co.

TEMPLES—

Draper Company.
Hopedale Mfg. Co.

TWISTERS—

Draper Company.
Fales and Jenks Machine Co.
Saco-Lowell Shops.

WARP STOP MOTIONS—

Crompton & Knowles Loom Works.
Draper Company.
Hopedale Mfg. Co.
The Stafford Co.

WEIGHTING COMPOUNDS—

Arabol Mfg. Co.
Bosson & Lane.
Faberwerke-Hoechst Co.
John P. Marston.
Keever Bros. Co.
A. Klipstein & Co.
Seydel Mfg. Co.
So. Dyestuff & Chemical Co.

WARPERS—

T. C. Entwistle Co.
Draper Company.

WILLOWS—

Saco-Lowell Shops.
C. G. Sargents Sons Co.

WINDERS—

Easton & Burnham Machine Co.
Saco-Lowell Shops.

Joseph Sykes Brothers,

Huddersfield,
England

CARD CLOTHING MANUFACTURERS

Hardened and Tempered Steel Wire Plow Ground
Card Clothing

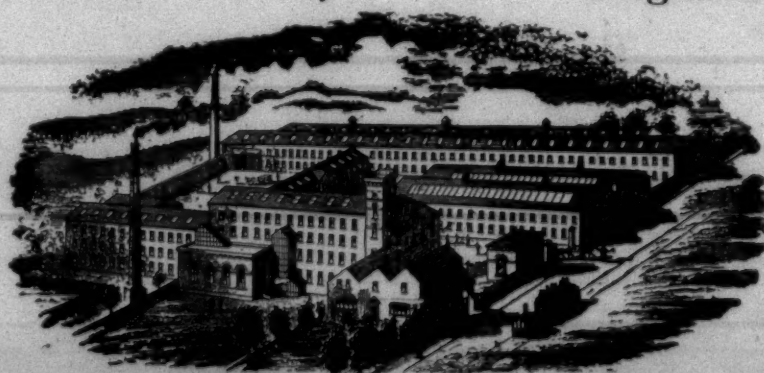
Revolving Top Flats Reclothed. Licker-ins Rewound. Bur-
nisher and Stripper Fillets, Dronsfield's Grinder Rolls. Emery
Fillets. All Regular sizes of Card Clothing always in Stock and
Shipped same Day Order is Received.

RICHARD D. THOMAS, Southern Agent

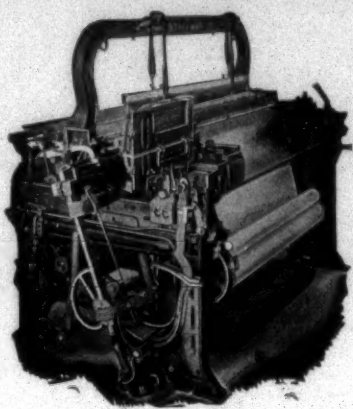
REPAIR SHOPS AND STOCK ROOMS

TOMPKINS BUILDING
P. O. Box 88
CHARLOTTE, N. C.

4½ PETERS STREET
P. O. Box 793
ATLANTA, GA.



"IDEAL" AUTOMATIC LOOMS



Unsurpassed in Simplicity, Durability and other Desirable Qualities. No special mill supplies required. They make less waste than any other loom.

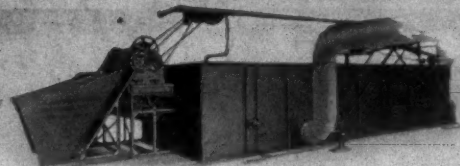
They Produce Superior Cloth

We invite correspondence and investigation

THE STAFFORD COMPANY
READVILLE, MASS.

FRED H. WHITE, Southern Agent
Independence Building, Charlotte, N. C.

"PROCTOR" DRYERS FIREPROOF



Substantial, Durable, and low cost of operation. Dryers for all kinds of Material

The Philadelphia Textile Machinery Company
BUILDERS OF DRYING MACHINERY
INCORPORATED 1885 PHILADELPHIA H. G. MAYER, CHARLOTTE, N. C. REPRESENTATIVE

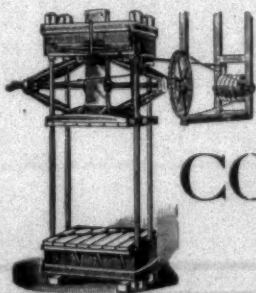
Clark's Directory of Southern Cotton Mills

Complete and accurate information relative to Southern Cotton Mills

Pocket Size—Price \$1.00 CLARK PUB. CO., CHARLOTTE, N. C.

THE "STANDARD"

BALING PRESS



FOR

COTTON MILLS

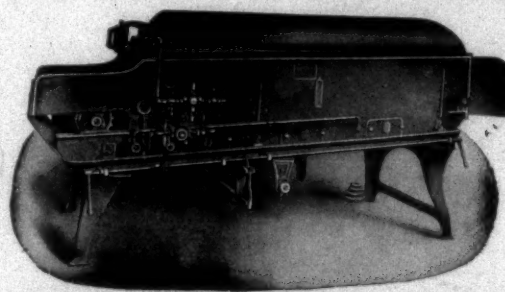
AS MADE BY

Boomer & Boschert Press Co.

No. 104 WEST WATER ST.
SYRACUSE, N. Y.

SEND FOR CATALOG

The Yarn Conditioning Machine



Continuous in operation
C. G. Sargents
Sons Corp.
Graniteville,
Massachusetts
Southern Agent
J. S. COTHRAN
Charlotte, N. C.



LAHUE NEVER-SLIP STEEL LUG STRAPS

SPECIALLY ADAPTED TO DRAPER LOOMS

PRACTICAL EFFICIENT ECONOMICAL

M. M. LAHUE & COMPANY

LOWELL, MASS.

We carry a full line of General Supplies and make a specialty of equipping new mills

WE MANUFACTURE

Oak Tanned Leather Loom Harness,
Belting. Weaving Reeds

AMERICAN SUPPLY COMPANY
PROVIDENCE, R. I.

A. KLIPSTEIN & COMPANY

644 Greenwich St., NEW YORK CITY
(Established 1872)
Southern Office: Commercial Nat. Bank Bldg, Charlotte, N. C.
CHEMICALS, COLORS, DYE STUFFS, SIZING, BLEACHING and FINISHING MATERIALS.

Importers of Ciba and Cibanon Fast Vat Dyes and all Colors made by the Society of Chemical Industry in Balse, Switzerland.

THE SOUTHERN TEXTILE BULLETIN
Charlotte, N. C.

The South's Leading Textile Journal